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ABSTRACT

This report reviews and synthesizes the most promising practices used to identify exceptionally talented students from the Native American population. Preliminary information includes an Indian Student Bill of Rights, discussion of the problem of talent identification, and discussion of special issues including diversity within the Native American population and cultural assimilation versus accommodation. Eight principles of identification are then presented. These include, among others, using assessments that go beyond a narrow conception of talent; using appropriate instruments with underserved populations; and using a multiple-measure/multiple-criteria approach to identification. Specific practices are then considered, which address: balancing the ideal and the practical; deciding on a concept of talent; recognizing the issues of a particular school; identifying traits that may influence manifestations of talent; recognizing behaviors that distinguish some Native American students from the general population; looking for manifestations of talent potential, alternative behaviors, situations, and interpretations; selecting and constructing appropriate assessment tools; and using the collected student data to make decisions. Recommendations address technical assistance, professional development, assessment portfolios, experimental programs, and program funding. Five appendices include technical information concerning evaluation measures, two sample case studies, and a list of assessment instruments. (Contains 77 references.) (DB)

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IDENTIFYING OUTSTANDING TALENT
in American Indian and Alaska Native Students

EC 302929

Javits Gifted and Talented Education Program
Office of Educational Research and Improvement • U.S. Department of Education

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Sadness In My Heart

My thoughts flow vigorously
through my mind
as I see the tears fall endlessly
because we, the younger generation, are blind.
Blinded by the white world
and what it brings,
we forget about our world
and all our sacred native things.
We have held our tradition
for so very long.
The elders are praying, wishing,
that it will live on.
We're forgetting about them
and our future.
Slowly we're losing them
and our culture.
We can't see
how we're hurting ourselves
by losing our identity,
our culture, tradition, heritage, and ourselves.
We are not Native Americans
without our world.
We are just dark-skinned Americans
in a white world.

Vena Romero, 13 years old

IDENTIFYING OUTSTANDING TALENT
in American Indian and Alaska Native Students

Carolyn M. Callahan
Jay A. McIntire

U.S. Department of Education
Richard W. Riley
Secretary

Office of Educational Research and Improvement
Sharon P. Robinson
Assistant Secretary

Programs for the Improvement of Practice
Eve M. Bither
Director

Office of Elementary and Secondary Education
Thomas W. Payzant
Assistant Secretary

April 1994

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About the Authors. . .

Carolyn M. Callahan is a Professor in the Department of Educational Studies, Curry School of Education, and Associate Director of the National Research Center on the Gifted and Talented at the University of Virginia, Charlottesville. Through the research center, Dr. Callahan is working on issues related to identifying gifted and talented students and has looked at approaches used by schools throughout the country. She has developed a national repository of promising approaches to identifying gifted and talented students. She is the incoming President of the National Association for Gifted Children.

Jay A. McIntire is a doctoral student at the University of Virginia, Charlottesville, and works at the National Research Center on the Gifted and Talented. His interest in American Indian and Alaska Native issues developed from his love of nature, from experiences with several Indian Nations while attending the National Audubon Society's Expedition Institute, and from experiences directing a summer school involving students and staff of the Micmac, Passamaquoddy, and Penobscot Nations.

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Foreword

Without a solid and challenging curriculum in place for *all* American Indian and Alaska Native students, those with outstanding talent have little opportunity to develop and assert their potential and, hence, their potential is not likely to be recognized. Even as musical ability is not developed and recognized without the opportunity to experience music, distinguished cognitive ability will not develop and materialize without the opportunity to engage in challenging intellectual activities.

Our charge in the preparation of this report was twofold: (1) to review and synthesize the most promising practices used to identify exceptionally talented students from among the Native populations of the continental United States; and (2) to suggest areas in which additional research must be conducted before there can be a sound sense of appropriate practices both in identifying American Indian and Alaska Native (AI/AN) students with talent potential and in meeting the needs of these children and youth.

We have carried out the task using the following principles to guide our work:

- The development of programs for exceptionally talented AI/AN students is not and should not be carried out at the expense of other AI/AN students. The goal of this report is to assist in efforts to provide the most appropriate educational opportunities for all indigenous students.
- While acknowledging the role that history and current circumstances play in placing the Native student at risk, identifying and developing programs for the AI/AN student with outstanding talent is necessary in order to develop the maximum potential of these students despite their circumstances.

Reynolds (1992) suggests that American Indians' lower test scores resulting from test bias have led to a deficit model of Indian education. Tonemah (1992) agrees with Reynolds' description of the education of Native students, at least in public schools.

Tradition

by Mike La Forge

My grandpa's skin is smooth as the earth's surface
Sitting by the fire
Showing his courage
Showing me how to be wise
Keeping my spirit alive
Trying to show me how to fix the bow
Pulling out the bow his father made
Passing the bow to me
Telling me it's mine now
Reaching inside showing happiness
Telling him thank you
Hearing him sing his traditional songs
Smelling the dried cedar burning in the fire
Feeling the heat breeze across my skin
Seeing my grandpa going over to sit down by the fire
Showing all the things that nature gives
Giving my love back.

He claims that

> *Public school efforts to educate Native students still focus on remedial efforts.*

Our aim is to begin to re-orient educators to a model of potential rather than deficiency.

The Final Report of the White House Task Force on Indian Education (1992) served as an orientation to the larger educational issues and provided a framework for recommendations.

We further acknowledge and accept the fundamental principles that were adopted by the Indian Nations at Risk Task Force. In particular, we would stress:

> Schools must provide enriching curricula and assistance that encourage students' personal best in academic, physical, social, cultural, psychological, and spiritual development.
>
> Parents, Elders, and community leaders must become involved in their children's education in partnership with school officials and educators. They must participate in setting high expectations for students, influencing the curriculum, monitoring student progress, and evaluating programs (*Indian Nations At Risk: An Educational Strategy for Action*, 1991).

The research available on Native peoples with outstanding talent largely focuses on the American Indian. The scarcity of research on talented Alaska Natives precluded specific and separate recommendations relative to that population based on research findings. There are commonalities across the characteristics, issues, and other variables discussed in this report. Therefore, we believe educators may also use these guidelines to direct decision making relative to identifying talented Alaska Native students. Hence, this report refers to both American Indian and Alaska Native students except in those cases where we are citing research particular to the American Indian population.

The preparation of this report is the result of the efforts of many individuals who have committed themselves to the task of providing improved educational programs to American Indian and Alaska Native students and in particular to the AI/AN student with outstanding talent. These individuals include those theorists and researchers whose work formed the basis for the literature review, and the members of the steering group for this document

who provided insight into the issues that must be addressed, references to literature we would not have identified otherwise, and helpful support. Special thanks go to those who participated in Project Northstar, developed by the Turtle Mountain Community College in Belcourt, North Dakota. We hope the content of the report reflects well on everyone's efforts.

Carolyn M. Callahan
Jay A. McIntire

The Boy Who Found Fire

by Vic Camp

A long, long time ago a brave boy was hunting for food. On his journey he saw a great light in the sky. He ran and found shelter under a Great Oak. He saw the light in the sky again and again, then all of a sudden he heard a tremendous roar. It frightened him very much and he was scared but since he was a warrior he stood up and prayed.

Soon the roar was gone and the great light was back again. He shouted at the sky but it did no good. Then the great light was on the ground and he ran to where the great light was with a stick. It did no good, the stick went right through the light so he thought it was a ghost.

He soon tried to touch it, but it hurt him. He found it ate wood so he fed it wood and took it back to his father's lodge. His father said, "Son you found a great thing. I had a dream about this, you are now a great warrior. Since you found it, you have to name it."

The little warrior thought for a long time and after that time he named it "fire." The Father was very proud of his son and from that day on the tribe had fire.

Indian Student Bill of Rights

The Indian Nations At Risk Task Force believes that every American Indian and Alaska Native student is entitled to

- A safe and psychologically comfortable environment in school.
- A linguistic and cultural environment in school that offers students opportunities to maintain and develop a firm knowledge base.
- An intellectually challenging program in school that meets community as well as individual academic needs.
- A stimulating early childhood educational environment that is linguistically, culturally, and developmentally appropriate.
- Equity in school programs, facilities, and finances across Native communities, and in schools run by the federal government and in public schools in general.

Overview

This document has evolved from the premise that the future of any nation rests with the ability of all its children and youth to realize their potential regardless of race, color, creed or socio-economic status. Recognizing that one population that has been neglected in the development of its potential is American Indian and Alaska Native children with outstanding talent, this report has been structured to provide educators with the background and guidance to confront this problem.

First, background information is provided to establish the oversight of American Indian and Alaska Native (AI/AN) children with outstanding talent and to establish the current need for giving specific attention to these students.

Next, the issues are discussed that must be faced in a considered process of identifying potential in this population. Following these issues, a review of eight appropriate identification principles is outlined as a basis for reviewing current and recommended practice.

Finally, the actions, programs, and research that have addressed the fundamental issues of identification of talented students are used as a basis for outlining steps in developing instruments and strategies for identifying talented AI/AN students. In addition, specific recommendations for further action are noted.

On the Other Side of the Window

By Donna Malchoff

(dedicated to a friend who lost his life in a hunting accident)

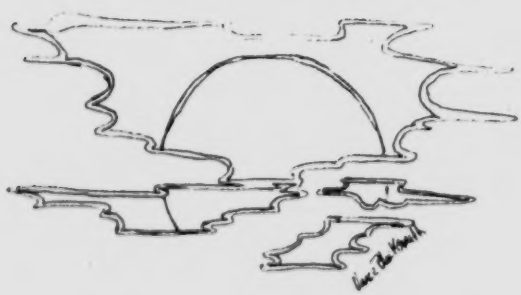
I begin life anew, people are happy with my
beginning just as they are with all beginnings.
Life is a beautiful path that has its rocky places
and some even more.

As I watch from the other side of
the window, I see the next generation.
They are young kids all striving
to be the best person they can be,
as they watch their role model's every step.
Knowing the hardships they will go through
I want so much to warn
and teach them about life.
But. . . . I am on the other side of the window.

Next, I see my culture dying off. My
generation is sitting there with
smiles of embarrassment on their faces,
as elders speak. Now, the words
no longer have meaning,
we don't understand. I want to
listen to the strong words of knowledge.
But. . . . I am on the other side of the window.

Then, I see beautiful, wise, overgrown adults.
There are only a few of them left now.
Their pepper colored hair shows wisdom,
and wrinkles show the lines of many warm smiles.
How I wish to hang on to them forever.
But. . . . I am on the other side of the window.

As with every beginning there is always
an end. . .a time to say goodbye
for the last time. Perhaps, sometimes you don't.
I long to comfort and calm the painful feelings,
but as I shed soft, lonely tears I am yet. . .
On the other side of the window.



Recognition of the Problem and the Need

Focusing the attention of this report on the particular population of American Indian and Alaska Native (AI/AN) students stems from the recognition of the gross underrepresentation of these students in programs for the gifted and talented. *The National Education Longitudinal Study of 1988: A Profile of the American Eighth Grader* (NELS:88) (1991) reports that the average national rate of public school eight-grade student participation in programs specially designated for gifted and talented students is about 8.8 percent. The American Indian/Alaska Native participation rate is only 2.1 percent.

The underrepresentation of AI/AN students in programs for gifted students is appalling and must be addressed if educators and policymakers are truly committed to the tenet that each and every child of all economic and cultural backgrounds should have the opportunity to achieve to his or full potential.

Studies of American Indian and Alaska Native students usually emphasize remediation rather than development of talent. Whether the decision is made not to offer programs for talented students in schools serving AI/AN children because of a belief that such programs are not needed or because funds are not available, the result is inequity of opportunity.

The opportunity for participation in special programs for talented students often does not exist within the schools AI/AN children attend. While 75.1 percent of the white non-Hispanic students attended schools where gifted programs were offered, only 55.5 percent of AI/AN children attended schools where such programs were offered. AI/AN students represented approximately 1 percent of the sample of eighth-graders in the NELS:88 study; they represented only .3 percent of the sampled students served by the gifted and talented programs.

Currently there are approximately 531,000 students in schools in the United States who are classified as American Indian or Alaska Native. Because only about 44,000 of those students are enrolled

Someday

by Sonny B.

I was identified as gifted in the third grade. . . . I feel that I have had some unique learning experiences, but there has been one drawback—I have been the only Indian in all of the programs that I have participated in. . . . I look forward to participating in an all-Indian program and sharing my experiences with other Indian students like myself.

in schools funded by the Bureau of Indian Affairs (BIA), the need for identification and programs goes well beyond the purview of the federal government and BIA; it is a national concern.

Not only is participation of AI/AN students in programs for the gifted limited, but achievement data reflect the result of inattention to the talented students in this population. According to the NELS:88 data, "Native students have the smallest percentage performing at the advanced level in mathematics of all ethnic groups." Projections based on current trends imply that even by the year 2000, the test scores of Native students will still lag substantially behind those of the general population on the American College Testing Program (ACT) and the Scholastic Aptitude Test (SAT) (Hillabrant, Romano, Stang & Charleston, 1992).

No group can be overlooked in efforts to identify outstanding talents in this country. Certainly, the nation can neither accept nor ignore the failure of the current systems of identification to locate and serve Native students in the schools.

Definition of Children and Youth With Outstanding Talent

After much deliberation over the current research in neuroscience and cognitive psychology, a task force of the U.S. Department of Education has adopted a definition of outstanding talent that reflects the concept of developing ability in children and youth:

> *Children and youth with outstanding talent perform or show the potential for performing at remarkably high levels of accomplishment when compared with others of their age, experience, or environment.*
>
> *These children and youth exhibit high performance capability in intellectual, creative or artistic areas, possess an unusual leadership capacity, or excel in specific academic fields. They require services or activities not ordinarily provided by the schools.*
>
> *Outstanding talents are present in children and youth from all cultural groups, across all economic strata, and in all areas of human endeavor.*
>
> (U.S. Department of Education, 1993)

Issues and Special Considerations

Identifying students with outstanding talent is neither simple nor easy. The unique characteristics and diversity of the American Indian and Alaska Native population contribute to the dilemmas faced by educators who attempt to identify and meet the cognitive and affective needs of all students with outstanding talent.

Although these unique AI/AN characteristics certainly overlap and relate to one another, they can be categorized as factors such as the following: geographic locale; philosophical beliefs about and past experiences with education and development; political factors such as the type of school serving the community (tribal, contract, BIA, or public); and institutional racism.

Diversity Within the American Indian and Alaska Native Population

Although the category of American Indian/Alaska Native as a whole is generally recognized as an underserved population, effective identification of these talented students rests on recognizing that there is great diversity within the population stemming from the following:

- Geographic locations;
- Tribal affiliations, languages, and cultures;
- The kinds of schools attended;
- Socioeconomic conditions; and
- Individual differences among the students themselves.

We must recognize, interpret, and use our understanding of this diversity to effectively identify AI/AN students with outstanding talent.

Success in identifying talented students from the diverse groups represented depends on first identifying the set of characteristics that represents outstanding talent within each of the following cate-

Indian Pride

by Carina Chimerica

I have pride in everything I do
Things like school, work too
The sports I do
But most of all that I am Indian.

Each of the tribes
We are special in every way
Like Hopi, Sioux, Paiute, and Navajo
And a lot more I didn't say.

We know our beautiful earth
We treat it with special care
We know our own culture
To us it is very dear.

I am proud of who I am
I am proud of what I do
I am proud of my tribe.

gories of talent: intellectual ability, creative or artistic talent, leadership capacity, or excellence in specific academic fields.

The task, then, is to find out how the characteristics of talent manifest themselves within each group.

Geographic Locations: Rural, Reservation, and Urban Students

One major variable influencing AI/AN students is geographic locale. Students who live in rural, geographically isolated environments are very likely to have had life experiences, exposure to tribal and cultural value systems, and unique opportunities that are all quite different from those of the AI/AN student raised in a more populated or urban environment.

Tribal Differences

Studies of AI/AN students tend to refer to these students as if they were a unitary group, culturally different only from the white population. In recognizing student potential, the danger is in overgeneralizing behaviors whether those behaviors are related to learning styles, values, or issues of wealth or lack thereof. While it is important to recognize the ways in which the AI/AN student in general might differ from the dominant culture, it is also important to recognize differences across tribal populations. Within tribal groups, there is also great diversity among children which stems from the degrees of traditionalism adopted by the family, whether or not the child is of multi-tribal origin, the degree of monolingualism or bilingualism, parental educational level, and the learning opportunities that have been provided to the child.

Schools Attended

The popular myth is that AI/AN children attend separate reservation schools. While approximately 12 percent of AI/AN students are served by schools funded by the Bureau of Indian Affairs (BIA-operated, contract, or grant) and 3 percent are enrolled in private or mission schools, the other 85 percent are served in public schools (Bureau of Indian Affairs statistics, 1994).

Thus, the issues surrounding the identification of AI/AN students with outstanding talent are complicated by the fact that within

most public schools the AI/AN student is in the minority and brings to the school setting a unique group of life experiences, often a different first language, perhaps different means of expressing talents and abilities, and a set of values that differ from the majority.

The issues involved in identifying AI/AN gifted students differ considerably from school to school. Nearly all of the talented children identified in BIA-funded schools will be American Indian/Alaska Native children. The primary questions and issues revolve around constructing definitions of talent (and programs) that reflect excellence and the need to prepare these able children to "adapt and flourish in the modern environment while maintaining bonds with traditional culture" (Indian Nations At Risk: An Educational Strategy for Action, 1991).

The issues and problems faced in the process of identification in some public schools—in particular on-reservation public schools and rural public schools that draw from predominantly AI/AN populations—will be similar to those faced by the BIA-funded schools because of the greater homogeneity of the population. However, in most public school settings the AI/AN child is compared to the majority-culture child and is frequently judged by his or her responses to tests and other assessment tools designed to identify talented children from the dominant culture. **Therefore, the challenge for public schools is to recognize alternative, culturally relevant indicators of outstanding talent that will be translated into effective assessment strategies and programming models for children not from the dominant culture.**

Cultural and Social Orientation

The ways in which a student and the student's family have adopted the styles and orientations of the dominant culture is an important consideration in the identification process. Within the AI/AN population, there is great variability in the degree to which a child may or may not have been reared in a family that is close to tribal customs, beliefs, or values or one in which the child's background and experiences have been more similar to that of the dominant culture.

Faas derived three categories of Native students, the "acculturated," the "bicultural" and the "traditional" (1982). The ramifica-

What Does Being a Tribal Member Mean to Me?

by Michael D.

My heart always knows I am Indian, and other influences, no matter how strong, will never be able to sway me from my Indian beliefs. Along with tribal membership comes certain obligations and responsibilities to myself and fellow tribal members. As a tribal member, I see an obligation to be knowledgeable about my ancestors, culture, and religious beliefs. In order to insure our future, all of these must be protected and held in trust for future generations. I hope as I grow to become an adult, I make my family and tribe proud to have me as a member.

tions range from considerations in the interpretation of test scores, to selecting appropriate indicators of talent, to expectations about certain performance areas. Decisions about the ways in which talents may manifest themselves, and, consequently, the appropriate strategies to use in identification, must reflect these differences for individual children.

For example, children who have been raised in an urban environment in families where tribal customs and values are not practiced have obviously had fewer opportunities to practice the skills and behaviors that would typify that tribe. Thus, these children should not be expected to exhibit the ability to store and process oral information in the story-telling tradition that might characterize the heritage of their tribe.

In Crow Country

by Mike Beaumont

I see a muffled reflection
as I look into nature's mirror
carrying itself over the stones.
I look up, and see a blue sky,
holding onto white clouds,
standing next to the sun. . .
In Crow Country.

I hear the elk call,
and the trees rustle in the wind.
A howl whispers through the
breeze
and in my mind, I can hear
the distant beat of the drum. . .
In Crow Country.

I feel my ancestors' presence
as I walk through the tall prairie
grass.
Visions of warriors, buffalo, and
teepees fill my mind.
The warriors on horses
stand tall with honor on their
faces. . .
In Crow Country.

Cultural Assimilation or Accommodation

The philosophy statement of the gifted and talented program of the Tiospa Zina Tribal School (in South Dakota) reflects recognition of the dual mission underlying the education of AI/AN students, those with the potential for outstanding achievement in particular. "The mission of our educational process is to provide the students . . . with the educational opportunity which will adequately prepare them to function in a multicultural and increasingly technological society while retaining their unique heritage and identity" (Brancov, 1992).

The acceptance of this dual mission creates a natural tension which should certainly be recognized in the planning of programs for all AI/AN students, but it presents a particular challenge in the education of future leaders across all areas of talent. Even the determination of which talents are to be recognized and fostered in the schools is influenced by this dual mission.

School Giftedness versus Tribal Giftedness

Undoubtedly every culture and every society has had different conceptions of giftedness and differing means of recognizing and rewarding giftedness. The ancient Romans rewarded political and military prowess; the Greeks rewarded orators, sculptors, and mathematicians; and the Mayan culture rewarded scientists and mathematicians.

American Indians and Alaska Natives may have many differing concepts of giftedness depending on their tribal beliefs and values. While the BIA contract schools have the authority to determine the curricula for their students and the values that will be the core of the school program, the curriculum and programs of the public schools and the BIA schools in the 1990s reflect the domains that the dominant culture has selected as important and worthy of instruction and reward.

This presents a particular dilemma and conflict when different groups within this country value different outcomes of development and instruction. While there are obvious ramifications for curricula and instructional decisions for all students, the issues involved when identifying and serving exceptionally talented students are somewhat more subtle, but no less important.

First, the definition of outstanding talent adopted by a school is predicated on fundamental beliefs about what giftedness is. As Reynolds (1992) has noted, the concept of giftedness may not even be present in some tribes because the singling out of individuals is, in itself, not valued. At another level, there are aspects of talent that are recognized within the schools but are not as highly valued by tribes, and there are talents that are recognized within particular tribal communities but are not valued in the schools.

Resolution of the conflicts which result from these differences in philosophy cannot be accomplished by decree. Any solution must involve close examination of what educators and the community consider to be the purpose of schooling within each locale and the development of a clear conception of outstanding talent.

- Is there an appropriate model for American Indians/Alaska Natives as a group which differs significantly from the model of the majority culture?
- How will intellectual talent be defined?
- Does the multiple intelligences model (verbal/linguistic, logical/mathematical, spatial, musical, bodily/kinesthetic, and personal intelligences) proposed by Gardner (1985) have more meaning for this community than the triarchic model of Sternberg (1984) (analytic, synthetic, and practical intelligences)?
- Which areas of artistic performance should be regarded in assessing creative talents?

- How is leadership defined and manifested?

Limitations and Resolutions

Finally, it is important to recognize that schools cannot successfully be all things to all people and that some aspects of talent development are best left to families, communities, and tribes. Those aspects include areas—

- Where the family, tribe, or community is in the best position to recognize and develop talent; and
- Where the school would, once again, be taking away recognition of the power of the tribe to best serve some of the needs of its children.

For example, the development of talented tribal dancers should probably be left to the community. Schools have neither the resources nor skills to develop talent in that area—the tribes do. Further, developing tribal dancers has historically been part of tribal education. To place tribal dance in the schools would send a message that the family, the community, and the tribe relinquish the responsibility for development of those talents.

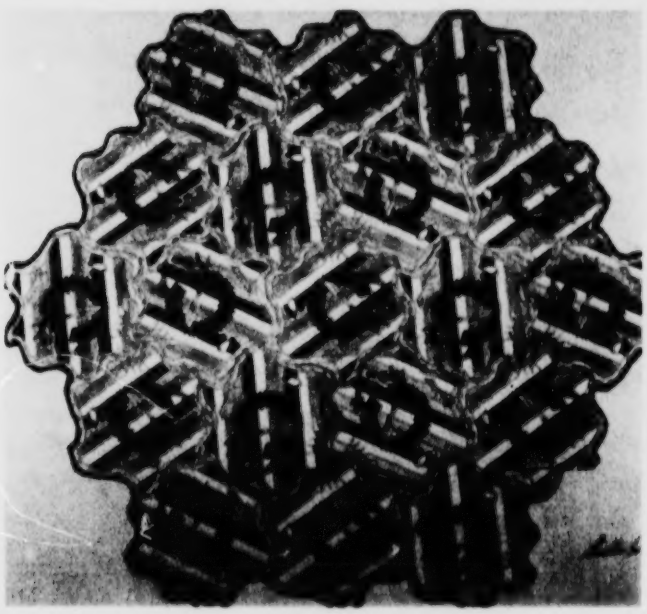
One also wonders what will happen to the joy of dance and the spiritual aspects of some dances if instruction in this talent area becomes one more "subject" in school. That is not to say that opportunities for performance, positive regard and recognition, and even special scheduling to allow for practice and development should not be provided for students who have those talents; however, educators should recognize who best teaches and most effectively rewards a given skill and ability.

Once the determination has been made that particular talents will be the focus of identification and programming in the schools, the involvement of families, the community, and the tribe will not be at an end. Individuals from each of these realms have much to offer to the processes of spotting and encouraging talent in the school context as well as out-of-school contexts.

General Principles of Identification

After a review of the literature on the identification of gifted and talented students, Abeel, Callahan & Hunsaker (in press) found general consensus around eight general principles that should underlie all plans for the identification of talent. All of these recommendations are based on the underlying premise that the community has clearly defined what it is willing to accept as a definition of outstanding talent. Any identification procedure that hopes to be valid must be based on a clear conception of the underlying beliefs about the construct.

The principles that follow provide guidelines derived from the general literature on identification of talent set forth by Abeel, Callahan & Hunsaker. The development of a strategy for identifying outstanding potential among American Indian and Alaska Native students would be greatly enhanced by consideration of these principles.



General Principles of Identification

Principle 1: Using assessments that go beyond a narrowed conception of talent

Principle 2: Using separate and appropriate identification strategies to identify different aspects of giftedness

Principle 3: Using reliable and valid instruments and strategies for assessing the construct of talent underlying the definition

Principle 4: Using appropriate instruments with underserved populations

Principle 5: Viewing each child as an individual and recognizing the limits of a single score on any measure

Principle 6: Using a multiple-measure/multiple-criteria approach to identification

Principle 7: Recognizing the serious limitations of using matrices in the identification process, and appreciating the value of the individual case study

Principle 8: Identifying and placing students based on student need and ability rather than on numbers that can be served by a program

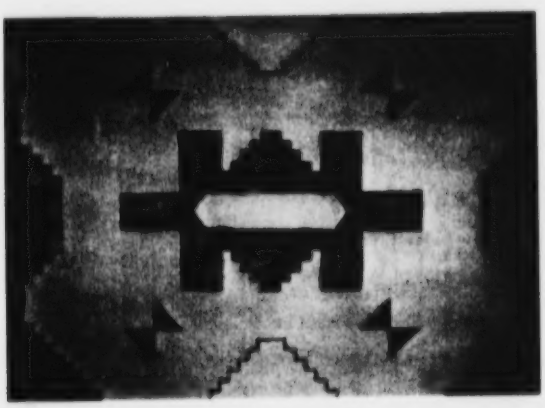
Principle 1

Using Assessments That Go Beyond a Narrow Conception of Talent

The past 20 years of research on cognition and intellectual functioning has expanded conceptions of talent and ability in many ways. Newer theories of intellectual functioning and information processing, such as those of Gardner (1985) and Sternberg (1984), have resulted in general recognition that the limited set of aptitudes assessed by traditional intelligence tests fail to adequately describe or predict the full range of human potential.

Newer conceptions of talent go beyond the analytical intelligence assessed by traditional intelligence tests to include creative and practical intelligence (Sternberg, 1984) and beyond verbal/linguistic intelligence to include logical/mathematical, spatial, bodily-kinesthetic, the personal (interpersonal and intrapersonal), and musical talents (Gardner, 1985). The latest definition offered by the U.S. Department of Education (see page 4) reflects this range with the inclusion of talents across the domains of intellectual, creative or artistic areas, leadership, and specific academic fields.

A broadened conception of talent will allow communities with large AI/AN populations to identify talents that reflect the cultures of the community, and will allow for multiple manifestations of talent. For example, the inclusion of musical intelligences (Gardner) or artistic talents (U.S. Department of Education) will allow for the inclusion of these talents as exhibited within the tribal traditions. Of course, this should never be interpreted to mean that talents in the academic fields do not exist or should not be recognized and nurtured in AI/AN students. The important focus is on identifying all relevant and important areas of ability.



Principle 2

Using Separate and Appropriate Identification Strategies To Identify Different Aspects of Giftedness

An expanded conception of talent necessitates an expanded conception of the identification process. If, as current research strongly suggests, the domains of talent are at least somewhat independent, then separate and appropriate strategies for identifying talents in each area must be developed.

If the community proposes to identify and serve students with musical talent as well as mathematical ability, then there should be a separate identification procedure in each of those domains with instruments and strategies matched to the domain.

Further, the selection of instruments and strategies should match the manifestations of ability within a particular culture. If logical mathematical abilities are manifested in tribal games children play, then there should be opportunities for the children to be observed and assessed as they engage in that play.

Principle 3

Using Reliable and Valid Instruments and Strategies for Assessing the Construct of Talent Underlying the Definition

Unfortunately, in many schools, broadened conceptions of human ability are reflected in formally adopted definitions of talent while traditional intelligence tests remain at the core of the identification process. This reflects both a limited view of talent and potential bias in the assessment of talent in American Indian students.

Many instruments currently used to identify talent have been examined for their reliability and validity in the general population and for specific purposes other than the identification of talent. However, many of the instruments (such as teacher rating scales, peer nomination forms, portfolio or performance rating scales) and even tests used in the process of nominating and screening for talent have never been subjected to any reliability and validity studies that would warrant their use for these purposes. Although face validity (the judgment that an instrument "looks like" it measures

what it claims to measure) is an excellent starting point in the construction of an instrument, it is insufficient for decision-making purposes.

This third principle and the corresponding lack of a pool of readily available instruments that have demonstrated reliability and validity is problematic to educators. However, if there are to be truly fair and legitimate efforts to identify across the range of talents, those who create the identification systems must examine instruments carefully to ensure reliability of the instrument within the target population (American Indian/Alaska Native) and validity for assessing the trait under consideration. That is to say, there should be evidence that instruments yield scores that are consistent when used in assessing AI/AN students, not just students in general. And the assessment tools should be valid indicators of potential abilities within the population assessed. For example, a verbal test of any ability will not provide valid indicators for children who are not fluent in the language of administration.

Guides for accomplishing a thorough review are provided in the Scale for the Evaluation of Gifted Identification Instruments (SEGII) (Callahan, Lundberg, & Hunsaker, in press; Callahan & Caldwell, 1993). (The SEGII is provided in appendix B of this document). The principle of using reliable and valid instruments relates closely to Principle 4.

Principle 4

Using Appropriate Instruments With Underserved Populations

Problems and Issues Involved in Using Traditional Intelligence and Achievement Tests

The research at the National Research Center on the Gifted and Talented at the University of Virginia and the review of documents for this report yield some distressing findings.

Standardized intelligence tests are still the most widely used assessment tools in assessing ability. Very few schools use instruments developed and standardized on special populations of students. Criticism of standardized tests for assessing AI/AN students is widespread in the literature. Traditional standardized intelligence and achievement tests are often evaluated as biased in favor of the

mainstream, Anglo/white culture for many reasons (including experiences of the students, values, and even testing procedures).

Assertions of bias range from specific ones, such as the bias of the Verbal portion of the Wechsler Intelligence Scale for Children—Revised (WISC–R) (Florey & Tafoya, 1988; Mishra, 1982), to the more generalized criticism that standardized tests are culturally biased (Tonemah, 1992; Reynolds, 1992; Tonemah & Brittan, 1985) and do not have norms based specifically for the populations under consideration (Kirschenbaum,1988; Tonemah & Brittan, 1985; Florey, Nottle & Dorf, 1986).

Bias may stem from several sources. One of these biases may come from a lack of experience with the language of standardized tests. Kirschenbaum (1988) points out that American Indian students may grow up in families in which English is not the primary language. Reynolds (1992) claims that standardized tests are linguistically biased against Native people. Empirical support for that argument has been offered by the studies of Tempest and Skipper (1988) and Mishra (1982). Tonemah and Brittan (1985) also suggest that American Indian students may not perform as well on tests that are not administered by a Native person.

Another criticism aimed at standardized tests is the inadequate sampling of AI/AN students in the development and norming of these tests and the lack of available norms on that subpopulation (Kirschenbaum, 1988; Tonemah & Brittan, 1985; Florey, Nottle & Dorf, 1986).

The advisability of renorming standardized tests and the use of norms developed for specific populations are highly contested in the literature:

- Tempest and Skipper (1988) advise that, until the Navajo norms match those of the test manual norms, both the general norms and Navajo norms should be considered when assessing Navajo children;
- Tonemah and Brittan (1985) suggest that renorming should be used only if the population differs significantly in cultural and linguistic characteristics;

- Sattler (1992) argues that pluralistic norms are dangerous; and
- Reynolds (1992) asserts that renormed tests are patronizing, misleading, and legitimize the deficit model of Indian education.

While Tempest and Skipper (1988) have developed norms from a small sample of Navajo children, those norms are not generalizable to all American Indian students nor to Alaska Native students. They suggest that closing the gap between test scores should be an educational goal for Navajos so that they can, "succeed in the mainstream of the dominant culture, if they desire."

Davidson's study of Anglo and American Indian children's comparative performances on the Kaufman Assessment Battery for Children (K–ABC) (1992) suggests, based on the equal performance of both groups on the composite scale, that the K–ABC may be a "culture-fair" instrument. Florey and Tafoya (1988) agree that the K–ABC may be less culturally biased than other tests due to the performance orientation of its subtests, but express concern that timed subtests might not be appropriate given the universal "continuous present" time sense of American Indians. Scruggs and Cohn (1983) agree that American Indian students may score lower than others on timed tests, but suggest that this is due to a greater concern with accuracy than speed among these students. Further empirical study of the effects of the timing factor are necessary (for which students, on what levels of tasks, and under what conditions?) before clear guidelines for interpretation of the effects of this variable can be developed. Use of timed tests should be accompanied by observations of the child and inquiry into possible false suppression of scores.

Despite the criticisms offered above, the general consensus seems to be that standardized tests, used carefully and cautiously, can yield some helpful data in the process of assessing the potential of AI/AN students but should not be used exclusively to select students for gifted education programs.

Sattler (1992) reports that achievement tests appear to be more culture-bound than intelligence tests, but advises that the cognitive ability of American Indian students should seldom be estimated by using only verbal measures. He states,

My Special Place

by Joseph Placencia

The sound of buffalo running, covering the hills with blackness. From the distance, a screech of the red-tailed hawk curdles your blood and races your heart. The lingering smell of medicine once brewed and mashed. The friendly warmth of spirits welcomes you to my secret place, to Shaman's Cave.

Mixing-holes and fertility rocks cover one third of the area. The paintings on the overhead rock tell of the Shaman's adventure. One hundred years or so and paintings are still in readable condition.

If anyone were to sit in my secret place, they would hear the drums and the heartbeat of the Shaman. Every Indian has a secret place and I can't tell you where mine is. Nor can any other Indian, because that's the Indian way of life.

Tests are a standard for evaluating the extent to which children of all ethnic groups have learned the basic cognitive and academic skills necessary for survival in our culture.

He also suggests,

Because American Indian children's visual–spatial abilities are much better developed than their verbal skills, misleading results may be obtained if reliance is placed primarily on the scores provided by verbal tests.

Sattler recommends further research on potential bias when using traditional intelligence tests with American Indian students.

Brescia and Fortune (1988) concluded from their review of the literature that there are more factors influencing poor test performance by American Indians than test bias based on cultural experience. They report that poverty, broken homes, low parental education, and health and nutritional issues play interconnecting roles.

Sattler (1992) concurs with the conclusion that variables such as socioeconomic status inflate what appear to be biased score patterns for minority groups. Twenty-five percent of the coordinators of gifted programs in a recent survey (Turtle Mountain Community College, 1992) identified socioeconomic differences as a major factor in the underidentification of talented American Indian students in their schools.

Teacher, Peer, Community, and Parent Rating Scales

Because of both the limitations of the sampling of intellectual abilities and the potential bias of the tests in assessing AI/AN students, scores from these instruments should never be the sole determining factor in assessing even the most narrow conceptions of abilities and talents. Reliance on a single test score will likely result in underidentification of talented AI/AN students. A recommended alternative procedure is the use of parent, teacher, peer, or community rating scales (George, 1987; Tonemah, 1992; Turtle Mountain Community College, 1992). Many such instruments have been developed and several address the particular population of American Indian students. Given the many issues discussed above, use of such instruments is important in the process of gathering valid and reliable data on this population.

Unfortunately, the instruments that have been used most commonly for gathering such data have lacked the reliability or validity data necessary for confident interpretation of the scores, especially for unique populations of students such as the American Indian/Alaska Native (Abeel, Callahan & Hunsaker, in press). Many of these instruments also violate the premise that different instruments should be used to assess different aspects of giftedness and, instead, mix items that would assess artistic talents with those that assess academic and leadership talents. A rating scale or checklist should clearly separate behaviors that are indicative of independent aspects of talent and the data should be used only as they are valid for the talent being considered. Effective use of rating scales requires further study by the users; this process is described in appendix A of this document.

Portfolio and Performance Rating Scales

Greater emphasis on the use of portfolio and performance rating scales permeates the recent literature on assessment in general. These approaches to gathering information about student performance are labeled "authentic assessment" because of the direct relationship between the task that the student is asked to perform and the actual learning objective and activities. Students are rated or judged on the basis of products contributed to the portfolio (poems, drawings, essays, pictorial essays, etc.) or the actual execution of a task or performance of a dance, a song, a dramatic reading, or dramatic staging, etc. Review may involve observations of live performances or it may include the review of audio or video tape presentations.

Portfolio products and performances may be judged either across time (looking at rate of improvement) or according to a set of criteria for judging a product or a performance at a particular time. These approaches provide more direct assessments of accomplishments and allow for multiple means of expression, thus reducing reliance on paper-and-pencil and largely verbal measures; however, portfolios and performances should never be used as the only measures of talent, achievement, or intelligence.

Caution should be exercised in the selection of these instruments just as it would be in selecting any other tool to use in assessing Native students. The potential for cultural bias in both the rating scale and the rater is always present. The criteria that are selected as reflecting the particular talent—whether verbal/linguistic ability,

A Leaf

by Chuck Lance

Dried in the piercing summer sun, like a flower withering away in the cold stillness of a winter night. The fragile texture slowly breaking apart in the wild summer breeze, its remains gently, slowly drifting away like spirits from a higher power. What once was, now is no more, a leaf.

musical ability, or any other talent from any other domain—must be expressed in ways that reduce the potential of bias for or against any particular culture. Further, the individuals who are using the rating scale must both understand the construct and be aware of the many ways the construct may manifest itself in the culture.

Plenty Coups

by Loretta Shane

A single warrior sits on his horse.
He is brave, and proud
to be a Crow Indian.

The wind coming through his hair,
whispers his past.
He has the power to survive.

Seeking the truth,
he has the desire and confidence
of a mighty warrior.

Life is like an obstacle,
but he is young and powerful,
with wisdom his only weapon.

He is the dawn of new people,
and we are the horizon.
Plenty Coups, Chief of the Crows.

Principle 5:

Viewing Each Child as an Individual and Recognizing the Limits of a Single Score on Any Measure

Unfortunately, a criterion score on a single measure often serves as an initial cutoff for further consideration in the identification process. While this practice is unwarranted in all cases, it is particularly detrimental to children from nonmainstream cultural groups where potential errors in measurement are compounded by potential bias in the assessment tool.

Standardized measures provide an estimate of expected error in the standard error of measurement that reflects how much you might expect a student's score to fluctuate across many testings. For example, assume a student earns a score of 32 on a rating scale and the standard error of measurement is 4. You could expect that if that student were rated repeatedly on that scale, 68 percent of the time the rating would fall between 28 and 36 and 96 percent of the time the student's score would fall between 24 and 40. (See appendix A for a brief explanation of standard error of measurement and means of calculating this figure.)

In assessing Native students, interpreters of test scores must remember that the standard error of measurement may be quite different for the students in that population. The less reliable a test is for a particular group or the more variability in a group, the higher the standard error of measurement (that is, the less stable a score is for any individual in the group). For those instruments where no reliability and/or standard error of measurement has been calculated or reported for the group under consideration, it is important to assess the characteristics and variabilities of the group before giving credence to the scores or assuming that the scores are accurate and stable measures of the ability being assessed. Even when the standard error of measurement for an instrument is known, it is best to consider multiple ways of detecting talent.

The goal of identification is not to "screen out," but rather to "screen in" children who may have potential that can be developed. Each instrument selected should be chosen with the aim of providing accurate information that will help educators determine the talents of individual children and to program accordingly. Instruments should not be selected as a means of "eliminating" children from services.

Principle 6:

Using a Multiple-Measure/Multiple-Criteria Approach to Identification

The discussion of the limitations of the individual instruments leads to a conclusion—in order to determine the presence or absence of talent (or talents), the results of multiple measures must be examined. One particular caution should be applied here. Multiple criteria should not imply multiple hurdles. That is, when looking at multiple criteria educators should be looking for patterns of accomplishment and potential. Examination of multiple criteria should not be translated into setting up arbitrary requirements such as "Students must meet six of seven criteria."

Further, allowances should be made for different raters to have different interpretations of talent based on each rater's observance of the student. For example, parents and community leaders may recognize talents in leadership that manifest themselves in community activities but not in schools because of the nature of school activities. A child who manifests leadership only outside of school among peers in unstructured activities may receive low teacher ratings because the teacher has provided opportunities for leadership only in highly structured activities.

It is also crucial to remember that *all* of the data used in a multiple criteria approach to identification should be based on reliable and valid assessment. One would not use an IQ score in a multiple criteria assessment of art ability.

Principle 7:

Recognizing the Serious Limitations of Using Matrices in the Identification Process, and Appreciating the Value of the Individual Case Study

A questionable practice in avoiding the biases of standardized tests is the establishment of a matrix that assigns point values for certain ranges of scores on tests and rating scales, sums the point values, and then sets cutoff limits for identification. This practice has been criticized for its inherent assumptions. For example, the arbitrariness in deciding how to assign for a given level of performance points is a serious flaw. The combining of test scores that measure different constructs and are normed on different populations is not justified. And finally, the greater variability in test scores (greater than rating scales) usually results in greater weight being placed on the test scores.

If the goal is to avoid test score bias, a more viable strategy is the use of the individual case study recommended by Tonemah (1992). Case studies require the collection of many types of data from as many sources as feasible and appropriate. The school and the family, the community and the tribe provide information about the behaviors that are indicative of potential ability. These behaviors that may be assessed through tests, rating scales or checklists (of behaviors, products, or performances), anecdotal records or testimony are then considered by professionals to determine whether the talent of the child warrants an educational program especially adapted to the displayed or potential talent.

Case studies are not only preferable, but absolutely necessary for assessing young children. The literature on young children indicates a very low predictive validity of standardized tests. The tendency is to delay identification because of the fear of *mis*-identification. Yet, early identification of AI/AN children with talent is critical, for early intervention and enhancements are likely to be the key to later success. Hence the observations of teachers and the use of performance and portfolio data are critical. Head Start programs and the teachers in those programs should be given specific training in the early identification of talent potential.

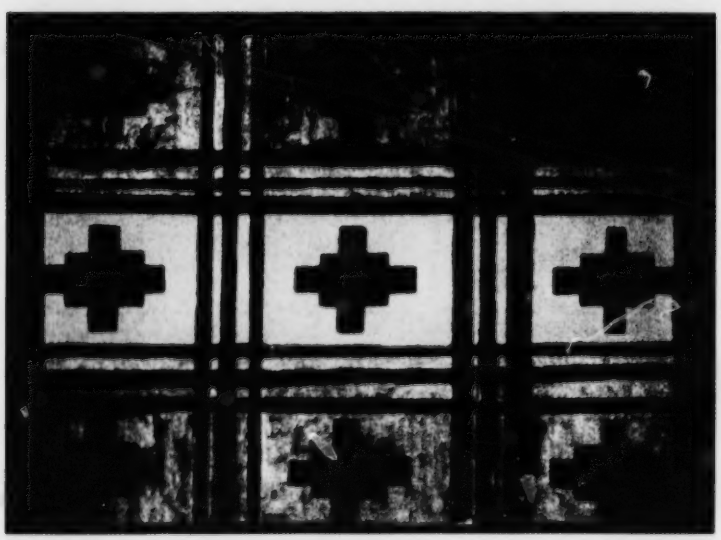
Principle 8:

Identifying and Placing Students Based on Student Need and Ability Rather Than on Numbers That Can Be Served by a Program

Too often the needs of children play a secondary role in decision making. Decisions about the appropriate services for children with outstanding talents should reflect the particular talents and the needs of the students. Schools should not identify 5 percent of the students in the school because they are allocated reimbursement for 5 percent. Too often the decisions on numbers to be served are a reflection of budgetary rather than educational considerations. There may be more children who have needs and abilities not met by the regular school curriculum or there may be fewer children.

Further, it is not a given that specific talents will exist in equal numbers or proportions in a given school or community. In one community or one grade level, there may be greater numbers of children who excel in verbal abilities; in another, more children may exhibit mathematical talent. Guidelines for identification of talent in Native students need to be correlated closely with the instructional interventions that are to be offered. Further, educators should be required to provide clear justification for identification and services *and* the connections between the two.

It is important to remember that the task of identification is not one of labeling. It is one of determining an appropriate educational program for children and enhancing their potential.



My Special Place

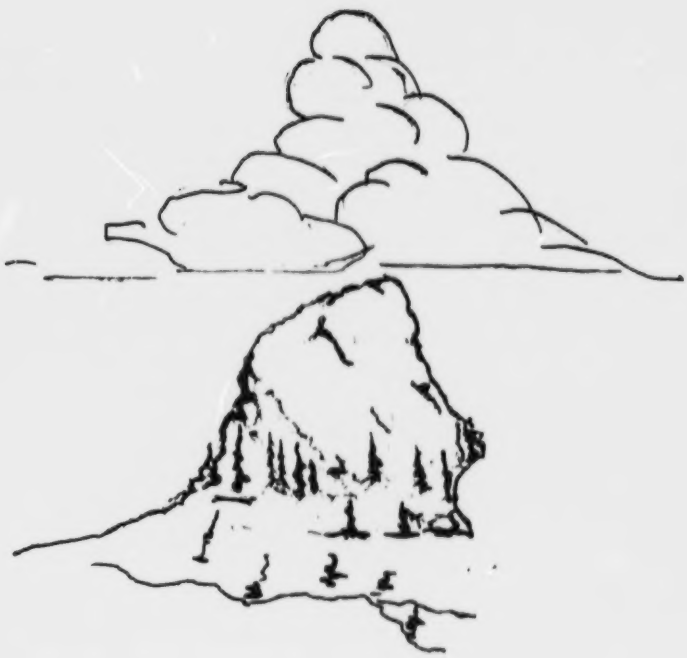
by Louie Norton

Tsaile Mountaintop is where my special place is. Looking over the rugged cliff into the deep valley, the ground looks like a carpet of piñon trees with a cleared patch where the little town of Tsaile is located.

The sparkling egg-yellow sun looking down on my back, the first warmth of morning sun pierces my back. Then I know a whole new day is born.

Standing where the wild, tall, green grass and patches of clovers cover the ground in an open meadow disappearing off the rocky edge, the sound of singing bluebirds and whistling of the piñon tree soothes my mind. The air is like the smell of sweet grass after a rainstorm.

In front of me, the valley of trees stand tall with every rolling hill and to the right are the dusty brown desert-like plateaus. In a tabletop flatland, dust devils sweep the ground, and to the left is a lake off in the distance reflecting the morning image of the shadowblack mountainside showing that nature is coming alive.



Specific Practices for Developing Instruments and Strategies

Balancing the Ideal and the Practical

It would be ideal to be able to develop multiple identification strategies—one for each tribe, one for each level of enculturation, etc.,—and to norm all instruments on all populations. However, resources for identification are limited by a tradeoff with provision of services. It is important that the strategies implemented in any school reflect the best possible practice given the available resources.

What follows is a plan for how to identify talent that is based on recommended practices. These general suggestions can be modified according to the type of school and type of population served.

Deciding on a Concept of Talent

A concept of talent should reflect both the current literature and the philosophy of the local community. As stated earlier, the U.S. Department of Education has adopted a definition of outstanding talent:

> *Children and youth with outstanding talent perform or show the potential for performing at remarkably high levels of accomplishment when compared with others of their age, experience, or environment.*
>
> *These children and youth exhibit high performance capability in intellectual, creative or artistic areas, possess an unusual leadership capacity, or excel in specific academic fields. They require services or activities not ordinarily provided by the schools.*
>
> *Outstanding talents are present in children and youth from all cultural groups, across all economic strata, and in all areas of human endeavor.*
>
> (U.S. Department of Education, 1993)

This definition embodies a broad range of conceptions of talent that includes intellectual ability, creative or artistic talent, unusual leadership capacity, or excellence in specific academic fields. The inclusion of these areas, the way each is defined, and the priorities placed on serving children with talents in each area are local decisions. Caution is important here. Stereotyping of American Indian/Alaska Native children and their abilities can lead to neglect of the academic areas and limit attempts to identify and provide programs for children with those talents. It is important to remember that Native children are capable across all areas of talent including the intellectual and specific academic areas.

Some of the recent investigations of the concept of "giftedness" suggest that the term and the concept as defined by the white/Anglo culture may have little meaning or relevance in some tribal communities (Faas, 1982; Romero & Schultz, 1992). However, Tonemah (1992) points out:

> *From earliest memory, tribal people relied for survival and prosperity upon individuals who were visionary and exemplary in the way they conducted their lives. The people were identified early in their lives, taught and nurtured by parents, mentors, and the tribe as a whole. These gifted and talented Natives eventually became mentor–teachers to the next generation. In this way, tribes passed on wisdom and strength.*

The specific term, "giftedness," causes some difficulty which apparently is related to a traditional sense of community and an unwillingness to highlight individuals or to place some above others (Faas, 1982; Romero & Schultz, 1992; Reynolds, 1992). Yet, it is possible with appropriate interviewing strategies to identify specific talent areas that are recognized by tribal Elders. For example, a study (Romero & Schultz, 1992) of selected Pueblo Indian tribes in New Mexico yielded four areas in which tribal Elders identified talents even after rejecting traditional notions of giftedness:

- Special abilities in speech and song;
- Ability to create with the hands;
- Abilities in acquiring and knowing when to apply knowledge; and
- Ability to empathize and give to others.

These talent areas can be closely aligned with the areas in the U.S. Department of Education definition and form the basis for operational definitions useful within the Pueblo culture. Faas (1982) reports that some special abilities were recognized within tribal cultures he studied even when the *concept* of giftedness was not acknowledged. These skills varied from leadership and oratorical skills to weaving, healing, and story-telling, but all were connected to benefitting others.

Faas also found that most acculturated and bicultural Indian people are likely to reject the existence of "this ethic in traditional Indian culture [that] states that a tribal member will not behave or perform in a way that will show up another tribal member" (1982, p. 4). This finding reaffirms the very important premise that each AI/AN group possesses a unique set of traits, beliefs, and values; each one is an individual who must be evaluated as such.

Recognizing the Issues of a Particular School

Identifying AI/AN students with outstanding talents can be a challenging task, compounded when these students attend public schools where they are a clear minority. In BIA or tribal contract schools, the comparison group is likely to be more homogeneous. The AI/AN student in public schools is often in an environment characterized as more heterogeneous in terms of socioeconomic status, ethnicity, levels of enculturation, and opportunity.

To have effective strategies, school officials must take into account the differences among the sub-populations in the school. It is necessary to articulate the particular background variable that may influence how characteristics representative of particular talents are manifested in the individual. And then, efforts must be made to include opportunities in assessment tools and strategies for students to manifest these behaviors indicative of talent. Staff development programs that re-orient staff to search for talent rather than deficiencies in the student population are critical. Before teachers, counselors, other school staff, parents, and students learn of ways in which diverse talent may manifest itself, they must first develop a belief that talent exists within the students.

Spirits

by Ruth Bearing

To see the young spirited Animal
is truly a breathtaking sight!
Getting a fly-away feeling
while reality ceases to fight.

He stands in all his glory!
Giving care to the winds
making your heart vanish
and forgetting all your sins.

He's got one magnificent horn
sitting at the top of his head
and a long wispy mane
the opposite color of lead.

He wears his crown proudly!
and marches through the land
with his little golden hooves
and the birds in his band.

Looking at awesome wonder
you'll know what I mean
It's like looking at heaven
without being seen.

Identifying Traits That May Influence Manifestations of Talent

There are two major obstacles underlying effective identification of talent:

- Recognition that factors inhibiting the expression of an ability may exist; and
- Recognition that a trait may be expressed differently in each cultural group.

Any discussion of a set of characteristics must be offered with concern about over-generalization. The great diversity in the AI/AN population makes it especially important to caution the reader that the traits and behaviors to be discussed are not universally held by the American Indian or Alaska Native. The particular values, beliefs, and experiences associated with a particular tribe, the degree of enculturation, and, as always, personal individuality influence the degree to which one student may be characterized by a trait or behavior.

The task, however, is to ask: Do American Indians/Alaska Natives have characteristic behaviors that one needs to take into account in developing identification practices, in selecting or creating instruments, and in using the results of traditional assessments?

Behaviors That Distinguish Some American Indian/Alaska Native Students From the General Population

The first category of behaviors relates to cultural values and beliefs. In assessing the potential of AI/AN students, it is important to recognize that the children from these cultures may be less assertive than those from other cultures (Florey & Tafoya, 1988; Sisk, 1989; Hartley, 1991). They may not speak out, and such behavior may be interpreted as lack of knowledge. Teachers must be sensitive to the need to specifically address each child with questions to get a full and fair assessment. Even more important, the child should be given enough time to develop skills and competence through listening and watching before they are asked to demonstrate learning either verbally or through actions.

In some cases, the tribe may value group performance over individual performance (Garrison, 1989; Shutiva, 1991). Students from

these backgrounds may not fare well in classrooms where competition is used as a motivator and may not perform according to their capabilities. Valuing group conformity (Bradley, 1989) may result in an inhibited performance where public recognition will follow any outstanding achievement by an individual. If a student is from a culture that is different from the dominant culture in its goals and in what it prizes (Sisk, 1989) or has a strong basis in religion and spirituality (Sisk, 1989; Shutiva, 1991), the material rewards (immediate and long-term) offered by classroom teachers for achievement may be regarded as irrelevant.

Many other characteristics and their implications should be considered. A brief synopsis is presented in figure 1 of other characteristic values and beliefs and the ways in which they may influence the identification process.

Hartley (1991) has generated a list of behaviors of gifted and talented Navajo children that may mask manifestations of their talent (see appendix C).

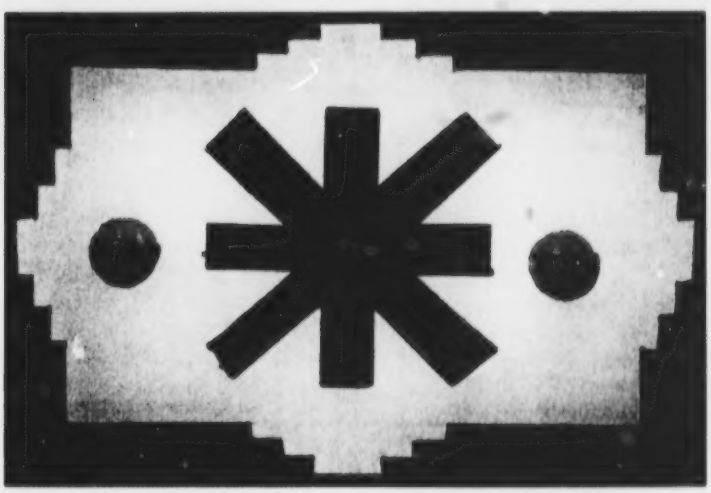


Figure 1. Characteristic Traits of American Indian/Alaska Native Students That Should Be Considered in the Identification of AI/AN Talented Students.

CAUTION: In considering the items below, it is important to remember that not all students, families, or tribes will exhibit all of these behaviors.

Cultural Behaviors, Values, and Beliefs	Implications for Identifying Talent
Nonassertive (Florey & Tafoya, 1988; Sisk, 1989).	Students may not volunteer answers; may actually be more capable than in-class performance would indicate; teachers need to develop strategies to elicit responses from all children.
Group valued over individual (Garrison, 1989; Shutiva, 1991). Group conformity important (Bradley, 1989). Cooperation valued (Daniels, 1988; Montgomery, 1989; Sisk,1989).	May not perform in competitive environment or where achievement will result in singling out or public recognition; teachers need to modify environment to ensure private evaluation and opportunities for group success to which individual excellence can contribute.
Nonmaterialistic (Sisk, 1989). Spirituality as a way of life (Sisk, 1989; Shutiva, 1991).	Material rewards (long-term and short-term) not likely to be a motivation to perform and achieve; community reward structure should also be used to motivate these students.
Less dependent on language (Garrison, 1989). Spatial rather than verbal (Montgomery, 1989).	May not express knowledge, skills, and potential using verbal expression; teachers must look for indicators of talent in in nonverbal products, performance, and expressions.
Not facially expressive, stoic (Montgomery, 1989).	May appear unmotivated, to lack curiosity or seem unenthusiastic about learning; teachers need to learn other indicators of involvement.
Responds to custom (Montgomery, 1989).	May appear uncreative; teachers need to look for creativity within the limits of the tribal customs (variations in rituals that enhance rather than detract; elaborations on accepted patterns of beading, etc.).
Reticent (not talkative) (Shutiva, 1991). Avoids small talk (Sisk, 1989).	May appear uninvolved and even unknowledgeable; provide opportunity for sharing ideas in alternative settings, allow more wait time for responses, give opportunities to express ideas in alternative media. Allow opportunities to increase social skills.
Different sense of time (Bradley, 1989; Daniels, 1988; Montgomery, 1989; Robbins, 1991; Sisk, 1989). Concern for accuracy over speed (Shutiva, 1991; Montgomery, 1989).	Monitor all testing to ensure imposed time limits do not affect assessment of aptitude or achievement; judge performance on product—not meeting deadlines. Use alternative, untimed forms of assessment.
Holistic learner (Davidson, 1987; Shutiva, 1991). Nonanalytic cognitive style (Kirschenbaum, 1988; 1989).	May have more difficulty with learning activities and problems presented in a linear, analytic format; teachers should vary both instructional style and evaluation formats; care should be exercised in interpreting test scores based on assessment using only one style.

Traditional AI/AN Educational Characteristics	Implications for Identifying Talent
Encouraged to learn from mistakes (Moore, 1989).	May not see "the right answer" as the point of answering a question or solving a problem; teachers need to probe the thought process before judging the outcome as simply incorrect.
Modeling is primary mode of instruction (Garrison, 1989).	May appear not to be a risk-taker in school; may wait to "see how" rather than try to solve problems on their own.
Excellence judged by contribution to the group (Shutiva, 1991).	May not perform in competitive environment or where achievement will result in singling out or public recognition; teachers need to modify environment to ensure private evaluation and opportunities for group success to which individual excellence can contribute.
More auditory and visual than verbal (Sattler, 1992). Wisdom of life experiences are valued (Montgomery, 1989).	Memory assessment, assessment of knowledge and acquired skill may be more accurate in auditory and visual modes; "textbook learning" may not be a good indication of potential.
Memory important in learning (George, 1987).	May focus on memory tasks rather than develop higher level skills even though capable; opportunities and rewards for using other levels of thinking must precede assessment.

Traditional AI/AN Families and Child-Rearing Practices	Implications for Identifying Talent
While valuing education, families value personal development and may not clearly convey relevance of school activities (Reynolds, 1992).	Students may not display talent in academic areas or in school setting; must consider many vehicles of identification and sources of data.
Discouraged from drawing attention to self (Daniels, 1988; Davidson, 1987; Robbins, 1991).	May not perform in competitive environment or where achievement will result in singling out or public recognition; teachers need to modify environment to ensure private evaluation and opportunities for group success to which individual excellence can contribute.

Interaction Between Traditional Culture and American Schools	Implications for Identifying Talent
Students may gossip about or tease students who excel (Robbins, 1991).	Students may be reluctant to draw attention to any excellence in performance in academics.
Multilingual (Montgomery, 1989).	This may be an indicator of verbal talents and abilities; however, when multilingualism inhibits strength in any language, the child may not have the opportunity to demonstrate talents verbally.

Looking for Manifestations of Talent Potential: Alternative Behaviors, Situations, and Interpretations

Sometimes it is important to look beyond the obvious. For example, a child who produces exemplary pottery might be easily identified as artistically talented. However, observation of the child in the process of creating the pottery may yield some information about other cognitive skills. For example, replication of patterns may indicate memory skills; the creation of suitable conditions for firing pottery or the creation of a new glaze may require problem-solving skills. In working with the community, look for ways in which the characteristics of talent might manifest themselves. Consider a few examples.

Examples of Behaviors That May Indicate Talent in Native Children

Memory can be illustrated by the child's recollection of patterns for pottery, bead work, or tool construction, or it might be demonstrated in the telling of detailed stories or legends, in songs, in the execution of tribal rituals, etc.

Problem solving may be illustrated by ways the child overcomes the usual obstacles ranging from survival to school achievement.

Unusual perception and analysis may be evident in the way the child explains relationships of environmental conditions or predicts changes in the weather.

Unusual verbal ability is often indicated by the child's early bilingual capabilities.

The effective identification of superior talent will be based on recognition of ways different abilities might manifest themselves in the AI/AN student. For example, Howard Gardner identifies linguistic ability as one of several areas of potential talent in humans. If a school commits itself to the identification of such a talent, then it will be necessary to specify examples of behaviors indicative of the talent. A sample of the types of behaviors indicative of AI/AN students with linguistic abilities is provided on the next page:

Indicators of Outstanding Verbal and Linguistic Abilities

Knows signs and symbols of the traditional culture (at an earlier age and beyond the average child) (Davidson, 1987)

Recalls legends in greater depth and detail after fewer hearings (Maker & Schiever, 1989)

Is more aware of cultural norms and standards at an earlier age (Davidson, 1987)

Has great auditory memory (George, 1987)

Remembers details of "everyday" events (Florey, Nottle & Dorf, 1986)

Makes up elaborate stories, songs, and/or poems (Maker & Schiever, 1989)

The local school should develop similar descriptors of traits for each area of talent to be identified. A list of such behaviors and circumstances under which they are likely to be manifested can form the basis for nomination forms, rating scales, and other locally developed instruments with the caution that ***responsible use of such instruments is dependent on establishing indications of validity and reliability.***

As this process evolves, it becomes important to avoid stereotyping AI/AN abilities and limiting definitions of excellence to traditional areas of demonstrated performance. American Indian/ Alaska Native students have talents across all domains of performance. Successful development of potential will depend on successful identification and programming for all talent areas.

Selecting and Constructing Appropriate Assessment Tools

The general principles discussed in the prior sections of this report suggest that once a concept of talent and the parameters of the student population have been defined by a school, then the task is to identify multiple ways of assessing potential. The first step is to review published instruments and recognize those with potential for identifying talent in the defined areas ***within the AI/AN student population.*** The National Research Center on the Gifted and Talented at the University of Virginia has established a databank of identification instruments and the reviews and uses of those instruments.

The limitations of currently available instruments have been discussed; however, use of select instruments with appropriate interpretation of results may yield some useful data on the aptitudes of American Indian/Alaska Native children. Appendix F lists some of the instruments that have been specifically mentioned as appropriate for assessing American Indian students. Careful review with a scale such as the *Scale for the Evaluation of Gifted Identification Instruments* can provide a basis for making a decision about the usefulness of the instruments (National Research Center on the Gifted and Talented, 1991; see appendix B).

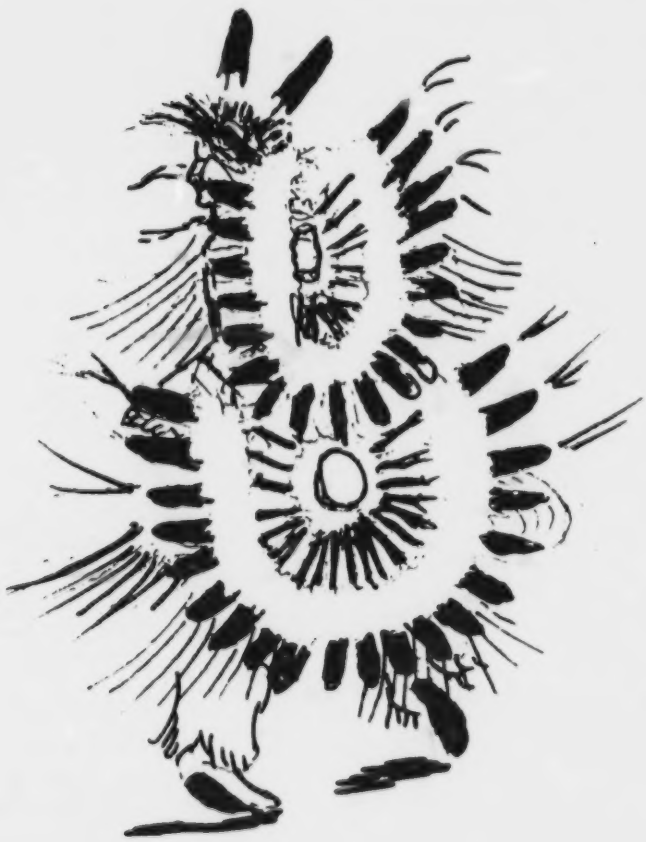
The second step would be to identify or develop other means of gathering data about the abilities of the students under consideration. Review each of the areas of talent and ask the questions: In what ways might we assess this talent and from whom might we gather this assessment data? A rating scale of students' products gathered in a portfolio and/or performance may be useful. Teachers, parents, or members of the tribal community may also have useful data.

Appendix D provides a listing of characteristics that could be used in developing rating scales for each of the areas noted in the definition of outstanding talents in this monograph plus two other areas identified by George (1987). When using these characteristics as a source for developing an instrument, care must be exercised to follow the guidelines that are provided in appendix A. In addition, it is crucial to come up with a scale for rating each item that is appropriate to a specific purpose. If you choose a comparative scale (top 5 percent, next 10 percent, etc.), the rater should be informed about the group to which the child is being compared (other students in this class, all students the teacher has ever had, other AI/AN students in this class, etc.). Another way to construct the rating is to use factors of frequency (e.g., nearly every day, once a week, once a month, hardly ever).

Finally, those who will use the scales should be instructed in how to use them appropriately. Videotapes that illustrate the behaviors, student work examples that illustrate the quality sought, etc., are useful to those less informed about the ways in which selected traits might manifest themselves.

Using the Collected Student Data To Make Decisions

First and foremost it is important to remember that the purpose of identifying special talent is to be able to make the most appropriate instructional decisions. Therefore, a case study approach is the most appropriate means of collecting and processing the information gathered. A model for a case study format is presented in appendix E. Case studies are most likely to provide both "snapshot" data from tests and "developmental" information from anecdotes, products, and performances reflected in portfolios. They also provide more specific detail on particular strengths. The opportunity for professional interpretation and elaboration is also enhanced by the full discussions of children that accompany case study analysis.



The Bald Eagle

by Yolanda Old Dwarf

I wait high in the Pryor mountains.
The green grass glistens with
drops of rain. No sunshine here
yet.

In the other valley the sun shines
bright.
When the sun's rays reach here,
the mountain seems to come
alive.

As we continue our journey,
I prepare myself, I wonder what
I am about to do. I gather
my prayers together and pray.

I wonder what spiritual
destiny awaits me.

Is that what will
adopt me, soaring high above,
the bald eagle?
in the coming days, I pull apples
off the tree to gather my strength.

Cherokee Nation

Indian Territory

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Recommended Actions for the Future

The review of research that supplied the background for this report revealed an appalling lack of empirical research on effective means of identifying and serving the talented American Indian and Alaska Native student. The recommendations here are drawn from the general principles used to identify outstanding talent, from what has been learned from the identification of potential in other minorities, and from the original work that has been done by a very limited number of researchers in this field (e.g., Tonemah, 1987).

Resolutions

Each of the recommendations below is in accord with and supported by the resolutions from *The Final Report of the White House Conference on Indian Education* (WHCIE) (1992). In particular, the following resolutions are apropos:

Resolution 5–3: "that the Federal government shall allocate new funds for research and development of culturally appropriate assessment for American Indian/Alaska Native[s] (on–off reservation) for all categories of appropriate services and placement" (p. 24).

Resolution 5–5: "that the Federal government establish and implement a program of research, demonstration, evaluation, dissemination, to improve the identification/assessment, instruction, curriculum, and administration of programs for exceptional infants, children, youth, and adults" (p. 24).

Resolution 5–6: " that existing legislation P.L. 94–12, P.L. 100–297, and P.L. 101–477 benefiting exceptional American Indian/Alaska Native[s] with disabilities and who are gifted and talented be fully funded, implemented and enforced to ensure that appropriate educational opportunities are being provided by LEAs, state, tribal, BIA, and all other service providers" (p. 24).

Recommendations

The process of supporting the development of identification tools should be predicated, first and foremost, on the notion that American Indian/Alaska Native students have potential talents across *all* domains of performance.

1. **Technical Assistance**
   Schools that are currently serving AI/AN children should be provided with technical assistance in developing and *validating* innovative measures and strategies *with particular attention to the characteristics of the tribes they represent* (for example, characteristics pertaining to the students' native language, interaction styles of the tribes, and dominant modes of expression). A successful process will involve not only the procedures suggested in this report but a cooperative effort of school personnel, the tribal community (particularly tribal Elders), and those from the academic community who can help develop and validate instruments.

   Technical assistance may include providing decisionmakers with the background to objectively review existing instruments (using guidelines such as those of the "Scale for Evaluating Gifted Identification Instruments," SEGII, see appendix B), with general instruction in developing and norming instruments, and with specific instruction in developing instruments for a region or for specific schools.

2. **Proposed ESEA Centers**
   The proposed ESEA technical assistance centers should ensure that AI/AN populations have access to services provided. The centers should act as repositories and disseminators of materials and resources relative to research, identification, curriculum, and evaluation of programs for the AI/AN talented student and act as resources for staff development activities in this field.

3. **Guidelines for Schools**
   Regulations, rules and guidelines, and other directions provided to BIA, contract, and public schools should focus on integrating the concepts of talent identification with programming and curricular issues. The identification of potential talent is not an end in itself. The potential of AI/AN students will remain unfulfilled unless significant efforts are made by

educators to structure a challenging and meaningful curriculum to match identified capabilities.

4. **Professional Development**
   Clear requirements for teacher preparation and in-service programs should be established in the area of talent recognition and, just as important, in the area of talent development. The future of any of the programs outlined in this document depends on knowledgeable and sensitive teachers and administrators.

5. **U.S. Department of Education Programs**
   Projects which have been funded under the Jacob K. Javits Gifted and Talented Education Program or other special projects of the U.S. Department of Education should be reviewed to discover and document effective practices in identifying and serving AI/AN students with outstanding talent.

6. **Student Portfolios**
   Performance assessment portfolios should be developed, adopted, and appropriately used in identifying students with outstanding talent among indigenous populations. It cannot be assumed that current identification efforts will not have the same biases as traditional paper and pencil assessments. Adapting the assessments to AI/AN cultures should be supported.

7. **Experimental Programs**
   Experimental programs that apply developmental approaches to identification should be developed and field tested with AI/AN students. Most schools serving these students do not provide the kinds of stimulation that would result in development of their full potential. From a very young age, all students from *all* cultures should be presented with challenging tasks that can be used both to stimulate development of capabilities and to assess potential. Programs ranging from within-classroom services to magnet schools and academies should be explored but only with strong provisions for careful research on the effects of the programs.

8. **Research Programs**
   Because of the small and inadequate research base in this field, it is very difficult to make specific recommendations about a research program. However, a research *program* that identifies significant problems and questions and then uses a systematic plan for gathering evidence is necessary for more effective

Winter

by Scott Plain Bull

Snowflakes dancing, painting
whatever they touch.
Stopping everything in time,
washing away
everything—invisible.

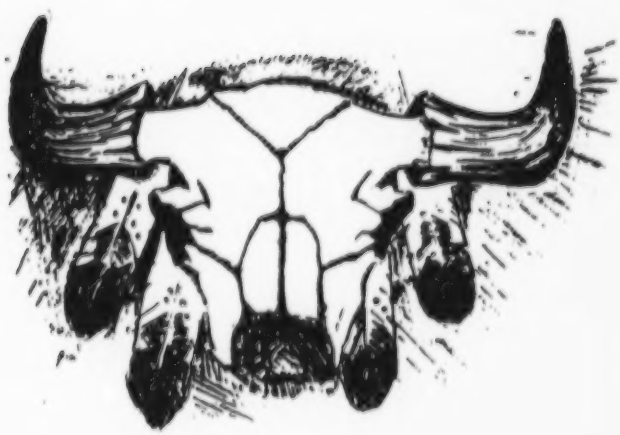
Hiding nature under a
sea of white,
a cluster of lifeless trees
marking depth, guideposts,
a picture drawn in black ink.

Water transforms to glass,
clouds lower to kiss the
blinding mountains,
cold painting the breath.

identification and development of talent in the AI/AN population. The almost nonexistent research base on the Alaska Native population of talented students is lamentable and should be given a prominent place in that research plan.

9. **Policymakers**
   Policymakers in federal, state, and local government agencies should have background knowledge of the needs of talented AI/AN students in order to inform the decision-making process concerning guidelines for identification of and educational programming for these students.

10. **Program Funding**
    Program funding for services to talented AI/AN students should integrate the identification of talent with programs of excellence across both academic and artistic realms of ability.



Afterword

The discussion and guidelines presented in this monograph are only a beginning to surmounting the challenges faced by the schools in addressing the needs of the American Indian or Alaska Native student with outstanding talent. Current efforts have simply been inadequate. Schools must recognize that the traditional approaches to identification are not working. Furthermore, schools must not be satisfied with simply identifying these students, but must focus on an identification *strategy* that leads to meaningful instructional modifications.

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Lawrence J. Alfred, Professor of Biological Sciences and Executive Director, Center for the Advancement of Science Education, California State University, Hayward, California.

Guy P. Archambeau, Chief, Western Branch, Office of Indian Education, U.S. Department of Education, Washington, D.C.

Phil Baird, President, National Indian Education Association and Director, United Tribes Technical College, Bismarck, North Dakota.

Goodwin "Keener" Cobb, III, Chief, Exceptional Education Branch, Office of Indian Education Programs, Bureau of Indian Affairs, U.S. Department of the Interior, Washington, D.C.

Mary Jo Cole, Manager of School Related Programs, Cherokee Nation Education Department, Tahlequah, Oklahoma.

John Derby, Chief, Fellowship and Contracts Branch, Office of Indian Education, U.S. Department of Education, Washington, D.C.

Marie Emery, Education Specialist, Branch of Exceptional Education, Office of Indian Education Programs, Bureau of Indian Affairs, U.S. Department of the Interior, Washington, D.C.

Bette Haskins, Indian Education Specialist, Division of Planning, Oversight, and Evaluation, Office of Indian Education Programs, Bureau of Indian Affairs, U.S. Department of the Interior, Washington, D.C.

Norbert S. Hill, Jr., Executive Director, American Indian Science and Engineering Society, Boulder, Colorado.

Velma Mason, Director of Alcohol and Substance Abuse Prevention, Bureau of Indian Affairs, U.S. Department of the Interior, Washington, D.C.

Joann Sebastian Morris, Senior Program Associate, Mid-continent Regional Educational Laboratory, Aurora, Colorado.

Bruce Ramirez, Assistant Executive Director for Professional Development, Council for Exceptional Children, Reston, Virginia.

Ramona Suetopka-Duerre, Director, Cook Inlet Tribal Council, Anchorage, Alaska.

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Appendix A

Establishing the Reliability, Validity, and Norms for Locally Developed Instruments

Reliability

A fundamental psychometric property necessary for all instruments that are to be used in the assessment of student abilities is that they must be reliable and valid. Establishing the reliability of a teacher rating scale, a peer nomination form, or any other instrument involves ensuring that it meets the following criteria:

1. If this instrument were scored by different individuals, the scores would be the same or nearly the same;
2. If different persons rated a child using this instrument, they would give about the same score or rating (assuming equal knowledge of the child in the area being rated); and
3. If the child were rated on different days, the rating would be about the same.

Demonstrating that an instrument is reliable requires trying out the instrument. If the instrument is subjectively scored (for example, ratings of a student portfolio) you would need to start with number one above. To demonstrate reliability of this type, two or more individuals would independently score or rate a student using the instrument. You would then compare the results to see whether or not there is agreement. Agreement in this case would show high reliability **for that one child with those scorers**. In order to show that an instrument is reliable, you would need to demonstrate agreement among raters for a large number of children. A common statistic used for such a demonstration is a correlation coefficient.

If an instrument is found to be reliable based on the first test, it would then be subjected to the second test. Some types of instruments that are objectively scored would start with this test. For example, if you were developing a teacher scale you might not be concerned about the scoring process if it were objectively scored, but would need to show that two teachers who know the child similarly in the area being assessed would rate the child about the same. To assure this, find two individuals who have similar exposure to the child's behavior that is being rated. These individuals would independently rate the child using the rating scale. The two scores would be compared for agreement. Once again, a number of children would need to be assessed in order to demonstrate reliability of the instrument.

For all instruments, you would want to know whether or not the children will be rated (or scored) the same or nearly the same on different days. In order to test this for an instrument, a group of children would be rated (or tested) using the same instrument on different days. The resulting scores would be compared. If there has been no expected change in children's performance over the time elapsed, you would expect little change in the test scores. Reliability cannot be assessed in this way if you expect change in the characteristics measured. Only when an instrument has been shown to be reliable in each of the preceding ways

(for which its reliability can be logically questioned) can it be said to be reliable.

Validity

Assessing reliability is insufficient. Using reliable instruments is inappropriate unless the instruments also have demonstrated validity. Students would not be selected for a basketball team on the basis of how many fish they can catch. Fishing skills are not a valid way of determining basketball potential. Validity of an instrument can be demonstrated in five ways:

1. **Face validity.** *The test should appear to measure what it claims to measure.*
   This first type of validity is unique in that it relies on appearance rather than statistical documentation. Many of the instruments designed for identification of American Indian children have good face validity, but, "face validity can only supplement information about predictive, concurrent, construct, or content validity and can *never take the place of such information*" (Borg & Gall, 1989).

2. **Content validity.** *It must be shown that the items on the instrument represent the content the instrument was meant to measure. There are two ways in which this is done—item validity and sampling validity; together, they demonstrate content validity.*
   Item validity refers to the extent to which each item is an appropriate measure of the area in question. Sampling validity refers to how well the entire field being measure is assessed by the items. For example, a multiplication problem might have item validity in a sixth grade math course final exam, but an entire final exam of multiplication problems would lack sampling validity if the class also covered fractions, decimals, and negative numbers. A rating scale of musical ability would not have content validity if it measured only harmonic analysis or assessed ability to complete word analogies. Content validity is usually determined by an objective comparison of the test with the content or construct to be measured.

3. **Construct validity.** *The instrument should measure the construct (a theoretical idea such as intelligence or creativity) that it is intended to measure.*
   This is particularly important to demonstrate when measuring abstract constructs such as intelligence, creativity, or outstanding talent. A number of studies based upon comparing the results of using an instrument to the theory behind that instrument are needed to demonstrate construct validity. Complex statistical procedures, such as factor analysis, are needed as well as a series of investigations which together are designed to demonstrate that an instrument is a valid measure of a theory.

4. **Predictive validity.** *The instrument should be a good predictor of future behavior of the subjects in the area that the instrument measured.*
   If one is interested in a test score's ability to predict future behavior or performance, then predictive validity must be established. If children are assessed for musical potential in third grade, it is expected that those rated most highly will be more successful as fifth-grade musicians than those rated lower. Predictive validity can be established by correlating the scores earned on an instrument with scores on measures of performance at a later date.

5. **Concurrent validity.** *The scores on an instrument should be related to other measures of the same (or similar) behavior based on a different instrument used at nearly the same time.* Concurrent validity is established by showing a strong correlation between the score on an instrument and the score on another (previously established valid and reliable) measure of the same behavior using a different instrument or method.

Standard Deviation

The amount of variation in obtained scores can be shown by calculating the standard deviation. A small standard deviation indicates that scores are very close together. A large standard deviation indicates that scores are spread far apart. In order to calculate the standard deviation for a test or other measure, first the average score (mean) on the test must be calculated. Next, the variance is calculated. To do this, the mean score is subtracted from one of the actual scores and this number is squared (multiplied times itself). This is done for every score. The resulting numbers are all added together and then divided by the total number of scores. The number resulting from this calculation is called the variance.

If each score is represented by letter "X," and the average score is represented by the letter "M," the variance would be calculated this way:

$$variance = \frac{total\ of\ (X-M)^2}{number\ of\ scores}$$

The standard deviation of a group of scores is equal to the square root of the variance. Therefore

$$Standard\ deviation = \sqrt{\frac{total\ of\ (X-M)^2}{number\ of\ scores}}$$

Standard Error of Measurement

Even using a very reliable and valid instrument, you would not expect students to score exactly the same each time. A standard error of measurement is a term that indicates how much a student's score might be expected to fluctuate across several assessments. For example, a student might score at the 89th percentile on a standardized achievement test and the standard error of measurement for that test might be 6. That means that if you were to test that student multiple times, his or her score would be expected to range within 6 points higher or lower than 89 (83rd percentile to 95th percentile) 68 times out of 100. A student's test score should always be expressed as a range of scores. That is, it should be said that John's true score (at one standard error of measurement) ranges from the 83rd to 95th percentile.

The standard error of measurement is dependent on the reliability of the test and the variation in test scores among those who were tested. To calculate the standard error of measurement on a test, the reliability and standard deviation of the norm group (which can be local) need to be known. The standard error of measurement can be symbolized "SE_m." If standard deviation is symbolized by "SD" and reliability symbolized by "r," then the standard error of measurement would be calculated

$$SE_m = SD\sqrt{1-r}$$

For example, if you have constructed a teacher rating scale and find the reliability to be .84 (very high for such instruments) and you know the standard deviation of the group to be 10, the standard error of measurement can be calculated

$$SE_m = 10\sqrt{1-.84}$$

$$10(.4) = 4.$$

So a student who scores 16 would receive a rating between 12 and 20 68 percent of the time if rated over and over.

Norm Sampling

Tests that report results in derived scores, such as percentiles or standard scores, calculate these scores by comparing the score of an individual with the scores of other individuals who made up the norm group. The closer the group you are testing approximates the norm sample, the more confident you can be that the results are accurate for your group. Tests should include a variety of data about the norm group, such as the number in the sample by age and sex. Also, information about the socioeconomic level, racial/ethnic background, rural/urban status, geographic region, and any groups that were left out of the norm group should be reported.

Many tests designed for national use base their norm sample on the percentages of each group found in the U.S. population as a whole. Thus, in such norm groups, test developers would desire approximately 1 percent of their norm sample to be American Indian. In examining tests for appropriateness in your situation, consider three things about the norm group: how well they represent the group being tested, how large the norm group was (a larger norm group yields more stable norms), and relevance. A nationally representative norm group may be relevant if a test is being used to predict performance in college, but locally developed norms may be more relevant in assessing the ability of reservation children to sand paint or in measuring tribal cultural knowledge, for example.

In developing instruments, it is important to include in your norm group all of those for whom the test might be used. Thus, if you design an instrument for measuring creative ability of all American Indian students, you would need to include members of a large variety of tribes, appropriate numbers of each sex and from each age level, as well as appropriate percentages of rural/urban and reservation/nonreservation students in your norm group.

Local Norm Development

In order to ensure an appropriate norm sample using an instrument that was normed on a different group, local norms can be developed. Local norms should be established for any locally developed instruments. The example that follows uses the hypothetical situation of developing norms for a rating scale to be used in one school district for 6th- through 8th-grade students. (If students would eventually be compared to others in their own grade rather than to all 6th- through 8th-graders, the process to follow would be completed three times, each time using only the scores from a single grade.) In order to establish local norms, the following steps would be taken:

1. The instrument would be used to assess all 6th- through 8th-grade students in the district or a random sample of those students would be assessed.

2. To find the average (mean) score, total all points earned by the students. This total would then be divided by the number of students assessed to give the mean score.

$$MEAN = \frac{\textit{total score of group}}{\textit{total number of scores}}$$

3. The next step is to find the standard deviation. First, the variance is calculated.

   a. If the mean were 25 and the scores were

15	24	30
18	25	32
20	27	35
22	27	

the variance would be calculated by subtracting the mean from each score, squaring the difference, then summing these squares.

Score	Score-mean	(Score-mean)^2
15	15-25 = -10	$(-10)^2 = 100$
8	18-25 = -7	$(-7)^2 = 49$
20	20-25 = -5	$(-5)^2 = 25$
22	22-25 = -3	$(-3)^2 = 9$
24	24-25 = -1	$(-1)^2 = 1$
25	25-25 = 0	$(0)^2 = 0$
27	27-25 = 2	$(2)^2 = 4$
27	27-25 = 2	$(2)^2 = 4$
30	30-25 = 5	$(5)^2 = 25$
32	32-25 =7	$(7)^2 = 49$
35	35-25 = 10	$(10)^2 = 100$
Total		366

Thus, the variance for the group would be 366.

b) The square root of the variance is the standard deviation.

$$SD = \sqrt{366} = 19.1$$

4. Once the mean and standard deviation have been established, it is possible to calculate a standard score. Standard scores are useful because they show how far above or below the mean an individual score falls. The simplest standard score to calculate is a "z-score." An individual's score minus the mean, divided by the standard deviation gives a person's z-score.

   Thus, using the prior example, the z-score for the person who scored 35 would be:

$$z = \frac{35-25}{19.1} = .52$$

Z-scores are easily translated into percentile scores using the table at the end of this appendix.

   Most z-scores fall between -1 and +1, with negative scores being below the mean and positive scores above the mean. One advantage of understanding z-scores is that one z-score is the same as one standard error of measurement. Therefore, the score of a person with a z-score of 0, if you were to test them over and over, would be expected to range from +1 times the z score to -1 times the z-score 68 times out of 100. Similarly, a person with a z-score of 2.5 would be expected to score from 1.5 times the z-score to 3.5 times the z-score 68 times out of 100.

5. Once z-scores have been established for your norm group, the same standard deviation would be used to give z-scores for individuals who later were assessed using the measure. In calculating a z-score for only one person, simply divide that person's score by the standard deviation established with your norm group.

By following these five steps, local norms can be developed for locally developed instruments or for instruments that have previously been normed on a different group.

Appendix B

Scale for the Evaluation of Gifted Identification Instruments (SEGII)

Instrument Name_____

I.D. # _____ Age groups_____

Implied/implicit definition of construct measured:_____

_____

Suggested use_____

Rater_____ Date_____

SCALE FOR THE EVALUATION OF GIFTED IDENTIFICATION INSTRUMENTS (SEGII)

RATING SCALE KEY:

EXCELLENT: The instrument meets all of the criteria standards.

GOOD: The instrument meets most of the described criteria.

FAIR: The instrument meets some of the criteria, or some limited evidence or information is presented.

POOR: The instrument meets none of the criteria, or no supporting evidence is available.

NOT APPLICABLE: Criteria do not apply to the instrument.

DIRECTIONS: The rater first should consult all available sources of reliability/validity information and other reviews of the instrument included in the National Repository of Identification Instruments database for purposes of evaluating the instrument. Then, for each of the identification instrument standards included in this rating scale, the rater should circle the appropriate degree ("Not Applicable, Poor, Fair, Good, Excellent") to which the instrument meets that standard (SPECIAL NOTE: "Not Applicable" should only be used for rare instances when a standard may not apply due to the nature of the instrument). Please note that in the criteria standards described below, the term "instrument manual" refers to the formal manual or any directions or other materials that may accompany the instrument. Finally, note that the term "instrument" should be considered in a very broad sense, thereby including non-traditional identification practices such as auditions, portfolios, performance rating scales, etc... as well as traditional standardized paper and pencil methods of gifted identification.

IDENTIFICATION INSTRUMENT STANDARDS — RATING SCALE

Page 1: Validity Standards

I. VALIDITY STANDARDS. The rater should consult the instrument manual and published reviews for this section. The rater should consider the instrument's purpose and stated construct while completing all validity standards.

1. **Content validity:** NA POOR FAIR GOOD EX

The instrument provides a clear definition of the universe represented and provides detailed evidence that the behavior domain was carefully sampled in instrument construction, including a detailed classification of test items by performance objectives along with an explanation of the selection procedures and/or references to special procedures.

2. **Construct validity:**

a. **Experimental construct validity:** NA POOR FAIR GOOD EX

Statistical data is presented from a variety of empirical studies using analyses such as factor or correlational analysis, that provide strong support that the instrument accurately reflects the stated underlying construct.

b. **Discriminant construct validity:** NA POOR FAIR GOOD EX

Empirical evidence demonstrates that the instrument measures something distinct from what is measured by other tests of similar format but different constructs. Further, the proposed interpretation of the construct is clearly stated in the manual and distinguished from other interpretations arising from other theories.

c. **Convergent construct validity:** NA POOR FAIR GOOD EX

The instrument correlates more closely with other tests measuring the same construct using different methods than with tests measuring different constructs.

3. **Criterion validity:**

a. **Concurrent criterion validity:** NA POOR FAIR GOOD EX

Scores on the instrument are related to performance on a separate task or criterion administered concomitantly. The manual also provides user information in terms of the appropriateness of generalizing from the validity information. A given coefficient should be r= >. 70 for a rating of excellent (Good: r= .70-.30; Fair: r= < .30; Poor: not reported).

b. **Predictive criterion validity:** NA POOR FAIR GOOD EX

Evidence is provided in support of the predictive nature of the instrument for students, such as by scores/performance on the instrument related to performance on separate task or criterion administered well after the instrument is used. A given coefficient should be r= > . 50 with a criterion relevant interval of at least two months for a rating of excellent (Good: r= .30- 50; Fair: r= < .30; Poor: not reported).

Validity Standards (cont.)

RATING SCALE

4. Gifted Construct Validity: NA POOR FAIR GOOD EX

Supportive data or other evidence for justification is provided which supports the particular use of the instrument to measure the existence of the construct of psychological traits, abilities, or attributes as originally defined and intended by the authors of the instrument. The instrument is used in this instance in the context of the gifted conceptions checked below:

___General I.Q. ___Psychosocial ___Multiple Intelligences ___Multiple Talent ___USOE ___Three-Ring ___Structure of Intellect

___Information Processing ___Other: _____

IF YOU HAVE JUDGED THE INSTRUMENT TO BE INVALID FOR THE CONSTRUCT MEASURED, DO NOT CONTINUE RATING THE INSTRUMENT.

Reliability Standards

RATING SCALE

II. RELIABILITY STANDARDS. The rater should consult the instrument manual and published reviews to complete this section. **All instruments must provide appropriate reliability evidence according to their format.**

1. Internal consistency reliability: NA POOR FAIR GOOD EX

The homogenous, consistent quality of the content of instrument items is evidenced by an appropriate reliability indicator such as split-half, Kuder-Richardson, or alpha coefficients. This reliability coefficient should be greater than .90 for a rating of excellent (Good: r= .70-.90; Fair: r= <.70; Poor: not reported).

2. Equivalence reliability: NA POOR FAIR GOOD EX

Alternate form reliability is demonstrated by correlational data between scores on two comparable or parallel forms administered to the same group of examinees at essentially the same time. This reliability coefficient should be greater than .90 for a rating of excellent (Good: r= .70-.90; Fair: r= <.70; Poor: not reported).

3. Test-retest stability reliability: NA POOR FAIR GOOD EX

Supporting evidence is provided for the stability of test scores over a period of time, by correlations on test scores obtained by the same groups of examinees on two occasions at least one month apart. For achievement or aptitude instruments, this reliability coefficient should be greater than .90 for a rating of excellent (Good: r= .70-.90; Fair: r= < .70; Poor: not reported). For affective and behavioral measures, this reliability coefficient should be greater than .70 for a rating of excellent (Good: r= .50-.70; Fair: r=.20-.50; Poor: not reported).

4. Intra/interrater Reliability: NA POOR FAIR GOOD EX

A high level of confidence for the objectivity and consistency of raters in scoring the instrument (when applicable) is demonstrated by such means as reported correlations, percentage of agreement, or analysis of variance. A correlation greater than .90 is considered the standard for a rating of excellent (Good: r=.80-.90; Fair: r=<.80; Poor: not reported).

5. Replicability: NA POOR FAIR GOOD EX

Well-defined and controlled test procedures and conditions are described such that normative data is well established and the instrument is effectively standardized and useful in order for the user to achieve duplication of test results.

6. Range of coverage: NA POOR FAIR GOOD EX

A wide range of coverage for the distribution of scores is provided, enabling the raw scores to effectively differentiate among students at the upper end of the scale.

7. Score graduation: NA POOR FAIR GOOD EX

The raw scores are converted into percentiles, Z-scores, T-scores, grade equivalents, stanines, or other common standard forms of reporting scores for purposes of interpretation.

IF YOU HAVE FOUND THAT THE INSTRUMENT IS NOT SUITABLY RELIABLE, DO NOT CONTINUE THE RATING.

Propriety and Respondent Appropriateness Standards

RATING SCALE

III. PROPRIETY STANDARDS. The rater should review the instrument and the manual to respond to this section.
There must be some evidence presented in support of both of these propriety standards(Do not check "NA").

NA POOR FAIR GOOD EX

1. Ethical/professional:
The procedures used in administration, instrument content, and recommendations for action conform to accepted ethical assessment practices with due regard to the rights and welfare of those involved in the evaluation (as defined by **Standards for Educational and Psychological Testing**).

NA POOR FAIR GOOD EX

2. Obligations and disclosure:
The instrument manual states that parents or guardians of individuals to be assessed must be made aware of all aspects and conditions required by the instrument for administration and assessment and formally agree to these requirements in writing, if appropriate. The manual also encourages for an open, direct, and honest presentation of results to individuals assessed, including an explanation of the results.

IV. RESPONDENT APPROPRIATENESS STANDARDS. The rater should review the actual instrument for this section. The rater should assess these appropriateness standards based upon the instrument's intended audience. Evidence must be provided to address all of these standards (Do not check "NA").

NA POOR FAIR GOOD EX

1. Justification/purpose:
The purpose, intent, or recommended use of the instrument is explained to the respondent in an understandable and straightforward manner in the instructions/directions section.

NA POOR FAIR GOOD EX

2. Face validity:
All test items are judged to be appropriate, unambiguous, and suitable for intended respondents in terms of immediate comprehension and degrees of difficulty. Further, the subject matter represented by items is presented in an unbiased fashion that appears relevant and interesting for the respondents.

NA POOR FAIR GOOD EX

3. Instructions:
All instructions are easily understandable and appropriate for age of respondent in terms of readability, concepts, vocabulary, length, and function to properly prepare the respondent for the instrument. The instructions clearly state response form(s) and include sample items that illustrate the necessary skills and item format required for each range of tasks.

NA POOR FAIR GOOD EX

4. Format:
The visual format of the instrument is aesthetically well-constructed and easily understandable in terms of its overall organization, layout, print quality, use of illustrations, and consistency of presentation of all ranges of task items.

NA POOR FAIR GOOD EX

5. Time/pacing:
Adequate and appropriate time limits for responses in relation to the subject matter and grade level/age of intended respondents are provided by the instrument.

NA POOR FAIR GOOD EX

6. Recording answers:
The instrument response modes are simple, direct, easily accomplished, and appropriate for the subject matter and the grade level/age of intended respondents.

Utility Standards

V. UTILITY STANDARDS. The rater should review the instrument and manual for this section. For standards that include sub-items, raters should review and check sub-items before issuing an overall rating of these standards.

NA POOR FAIR GOOD EX

1. Audience identification:
The instrument clearly states appropriate age or grade level of respondents and purpose for the identification of gifted students. This information must be presented (if none is given, check "Poor").

Grade level_____ Age level_____
Purpose in identifying gifted students _____

2. Administration:

NA POOR FAIR GOOD EX

a. Training:
The instrument can be administered by one regular school staff individual and requires less than one hour of specific training and/or preparation. Administration of the instrument by a teacher or aide is considered the standard for a rating of excellent (Good: school counselor; Fair: licensed psychologist; Poor: no information).

NA POOR FAIR GOOD EX

b. Group size:
The instrument can be administered to large groups of students, providing for effective large scale evaluation. Evaluation of large groups of students (10 or more) is considered the standard for a rating of excellent (Good: Small group (2-10 students); Fair: individual administration necessary; Poor: not clear or not stated).

Utility Standards (cont.)

RATING SCALE

c. Time: NA POOR FAIR GOOD EX

The instrument requires an appropriate amount of time for ease of administration (and is organized to allow for appropriate breaks if needed) given the age level of the respondent. Completion time of 20 minutes or less is considered the standard for excellent (Good: 20-40 minutes; Fair: 1 to 2 hours; Poor: > 2 hours or not reported).

d. Manual quality: NA POOR FAIR GOOD EX

The instrument manual is legible, well-organized, consistent, easy to use, and thorough in its directions for test administration so that the test user can duplicate procedures used in standardizing the test. The manual also provides comprehensive information in regard to purpose/uses of the instrument and reliability and validity data.

3. Scoring:

a. Scoring ease: NA POOR FAIR GOOD EX

The instrument can be easily and objectively hand-scored or machine-scoring service is available.

___ May be hand-scored or machine-scored

___ Must be hand-scored ___ Must be machine-scored

b. Score conversion: NA POOR FAIR GOOD EX

A simple, one-step process of accurately converting raw scores to normed/interpreted scores is provided by use of clearly explained tables, graphs, or scoring keys.

c. Report clarity and distribution: NA POOR FAIR GOOD EX

Examinee scores or performance are presented in clear and self-explanatory terms free of unnecessary jargon and are distributed in a timely fashion.

4. Interpretation:

a. Evaluator training: NA POOR FAIR GOOD EX

The instrument can be directly and immediately interpreted by regular school personnel relative to a specified norm group or standard. The necessary qualifications for persons interpreting results and guidelines are explicitly stated in the test manual. Interpretation by teacher is considered the standard for a rating of excellent (Good: counselor input required; Fair: licensed psychologist input required; Poor: not clear or not stated).

b. Norm range: NA POOR FAIR GOOD EX

Data is provided for purposes of interpretation indicating that the instrument has been normed on a broad range of educational ability or is applicable to groups falling at the upper end of the continuum.

c. Norm timing: NA POOR FAIR GOOD EX

The norms for the instrument are current (within last five years). Date of norming:_____

d. Norm groups: NA POOR FAIR GOOD EX

___ Norms are provided for regular populations of students.

___ Norms are provided for gifted populations of students.

___ Norms are provided for special populations:

- ___ handicapped
- ___ economically disadvantaged
- ___ minority: ___ black ___ Native American ___ Asian ___ Hispanic

___ No norms are provided.

5. Evaluation: NA POOR FAIR GOOD EX

Explicit guidelines are described for using test results to make objective and valid assessments of student performance and to make defensible decisions in regard to placement, diagnosis, or selection of services for students.

6. Political viability: NA POOR FAIR GOOD EX

The instrument is considered as an accepted means of identification of gifted students by various interest groups and professional education/measurement/evaluation associations.

VI. GENERAL RATER COMMENTS: (Please use the reverse side for your remarks.)

Appendix C

Traits of Gifted/Talented Navajos That May Inhibit Recognition When Traditional Paradigms of Identification Are Used

(Derived from Hartley, 1991, pp 57–58)

Each of the traits listed below is one that should be recognized as *possibly* affecting the manifestation of the talents that the child has. In using rating scales, teachers should be alert to ways in which they can look beyond, compensate for, or otherwise use this information in making a fair judgment about the child's true identity. For example, if a teacher is seeking to judge the child's ability to process information and the child may have a better auditory memory than visual memory, the teacher may read the child a story or tell a story and then ask the child a series of questions about the story. It is important to note the word ***may*** precedes each of the descriptors. Individual children will differ.

A gifted/talented Navajo:

1. May be humble.
2. May have a more developed aural/oral memory than visual memory.
3. May be quiet.
4. May not be competitive for leadership roles.
5. May need more concrete situations in which to learn.
6. May use traditional ways of dealing with personal issues (e.g., using a medicine man and other methods deemed unconventional by white, middle-class standards).
7. May not assertively or readily suggest better ways of doing things.
8. May not openly express feelings.
9. May have difficulty overcoming peer pressure.
10. May not look one directly in the eye—it is considered impolite (a non-Navajo teacher may misconstrue this behavior as nonattentive or rude).
11. May put family and religious or spiritual activities ahead of school functions.
12. May not challenge something he or she knows is incorrect.
13. May prefer to do some work with others, but to practice independently.
14. May not be comfortable with public speaking.
15. May not have a strong reading environments at home.
16. May not have strong first (native) language background.
17. May not ask a lot of questions—just enough to get the necessary information.
18. May need instruction and training in certain modalities, particularly kinesthetic.
19. May need time to reflect and practice before producing.
20. May be fluently bi- or trilingual.

Appendix D

A Pool of Potential Traits/Indicators for Checklists or Rating Scales

Each of the traits or indicators below is from a rating scale recommended for use in the literature on identifying the American Indian student with outstanding talent (as indicated by the references in parentheses after each indicator). The first 11 categories of ability are those derived from the definition of outstanding talent of the U.S. Department of Education. The last three represent categories derived from studies of the ways in which specific tribes have defined this construct.

Guidelines for Use of the Characteristics List

Several guidelines need to be followed if these traits are to be used to construct a rating scale or checklist in a way that will yield reliable and valid assessment of the outstanding talents of the American Indian student.

1. The traits are grouped according to the underlying type of talent they represent. To select one or two from each category and recombine them into a single indicator would violate the assumptions that there are a variety of talents and that a gifted individual child may have skills and abilities in one area but not necessarily all areas.
2. The reliability of an instrument is very dependent on having a fairly broad sample of items. Using only one or two items from each category would not be sufficient to ensure reliable indications of talent.
3. For valid assessment, choose those items that match your definition of outstanding talent and *only* those items appropriate for the group you are assessing.
4. Valid assessment also will rest on the knowledge of the people using the scale. A parent rating scale should not ask the parent to assess behaviors the parent is unlikely to observe; a teacher rating scale should not ask teachers to rate items they are unlikely to observe. People do not change their perceptions just by being given a rating scale. Effective use of the scales by those unfamiliar with the ways in which the traits are manifest *in the target population* will fail to observe the traits.
5. Effective use of any scale derived from these items will depend on thorough descriptions of how the behavior may be manifested in the population of students served. For example, if you select "self-confidence" as an indicator of leadership ability, define specific ways in which that behavior would manifest itself in the tribes under consideration, given the degree of enculturation of the children and the opportunities provided these children to demonstrate that trait. For highly traditional children, it will be very important that tribal Elders and others familiar with the values and traditions of the tribe help describe the ways these traits will be manifested.

6. Once the rating scale has been developed, it should be tested for reliability and validity. (See appendix A.)

The Characteristics List

NOTE: These items have been grouped on the basis of their face validity for assessing each of the areas of talent. Your definition of the talent or your experience with a characteristic may suggest a different placement or elimination of that talent altogether. Some of these characteristics are general statements which will need carefully developed examples for the specific population and some have been derived from experience with the culture.

Intellectual Talents

- adept at problem solving; seeks logical solutions to problems (Montgomery, Bull, & Sayler, 1990; Tonemah & Brittan, 1985)
- task commitment; has a long attention span when interested (Tonemah & Brittan, 1985; Montgomery, Bull, & Sayler, 1990; Turtle Mountain Community College, 1992)
- intuitive/insightful; can reason out difficult problems (Tonemah & Brittan, 1985; Turtle Mountain Community College, 1992)
- unusually aware of tribal culture (Tonemah & Brittan, 1985)
  - respectful of tribal elders
  - knows and understands significance of tribal history
  - knows and understands tribal culture
  - is adept in tribal language
- has a keen sense of humor; can see the humor and irony of everyday events (Tonemah & Brittan, 1985; Turtle Mountain Community College, 1992)
- predicts from present information (Tonemah & Brittan, 1985)
- is sensitive to and perceptive of environment; notices and remembers patterns, details, interactions (Tonemah & Brittan, 1985)
- able to remember what is heard in great detail; has a good memory for what she/he hears or reads (George, 1987; Tonemah & Brittan, 1985; Montgomery, Bull, & Sayler, 1990; Turtle Mountain Community College, 1992)
- able to remember what is seen in great detail (George, 1987; Tonemah & Brittan, 1985)
- readily grasps concepts (Montgomery, Bull, & Sayler, 1990; Tonemah & Brittan, 1985)
- bilingual with facility in at least one language (Tonemah & Brittan, 1985)
- shows ability to plan and complete a task (Turtle Mountain Community College, 1992)
- is capable of abstraction (Turtle Mountain Community College, 1992)
- synthesizes information easily (Turtle Mountain Community College, 1992)
- learns most things rapidly with little repetition (Turtle Mountain Community College, 1992)
- uses a variety of resources (Turtle Mountain Community College, 1992)
- quickly or with persistence analyzes problems and puzzles (Montgomery, Bull, & Sayler, 1990; Turtle Mountain Community College, 1992)
- grasps central idea, often without teaching (Turtle Mountain Community College, 1992)
- reads and/or speaks at an advanced level (Turtle Mountain Community College, 1992)
- is able to express the complex simply and precisely (Turtle Mountain Community College, 1992)
- enjoys complicated games (Turtle Mountain Community College, 1992)

- will probe or test limits of an argument more often than most (Turtle Mountain Community College, 1992)
- can see the common elements in different situations (Turtle Mountain Community College, 1992)
- quickly grasps information about his/her culture (Turtle Mountain Community College, 1992)
- learns material related to his/her tribe with less repetition than other children; has a good memory for stories, myths, and traditions (Turtle Mountain Community College, 1992)
- is highly interested in language, including tribal language [where the opportunity exists] (Turtle Mountain Community College, 1992)
- patient and pays attention even when difficult task (George, 1987)
- displays a questioning attitude (Montgomery, Bull, & Sayler, 1990)

Creative Talents

- produces a variety of ideas and solutions, is flexible; generates a large number of ideas or solutions to problems/questions (Tonemah & Brittan, 1985; Turtle Mountain Community College, 1992)
- improvises with commonplace materials (Tonemah & Brittan, 1985; Montgomery, Bull, & Sayler, 1990; Turtle Mountain Community College, 1992)
- invents improved ways of doing things; invents ways to make improvement to things or ways of doing things (Montgomery, Bull, & Sayler, 1990; Turtle Mountain Community College, 1992)
- works with a high level of energy (Turtle Mountain Community College, 1992)
- identifies problems others commonly miss (Turtle Mountain Community College, 1992)
- often uses good but unusual methods or ideas (Turtle Mountain Community College, 1992)
- is reflective (Turtle Mountain Community College, 1992)
- is self-confident (Turtle Mountain Community College, 1992)
- displays a great deal of curiosity; displays curiosity about many things; has many interests (Tonemah & Brittan, 1985; Montgomery, Bull, & Sayler, 1990; Turtle Mountain Community College, 1992)
- is original in thinking (Turtle Mountain Community College, 1992)
- displays a keen sense of intellectual playfulness (Turtle Mountain Community College, 1992)
- has a vivid imagination (Turtle Mountain Community College, 1992)
- applies traditional ideas in new ways (Turtle Mountain Community College, 1992)
- expresses creativity in contemporary Indian activities (Turtle Mountain Community College, 1992)
- uses Indian/tribal imagery as an element of creative work; uses imagery to gain insight, ideas, or understanding (Montgomery, Bull, & Sayler, 1990; Turtle Mountain Community College, 1992)
- is exceptionally aware of uses or meanings for natural materials (Turtle Mountain Community College, 1992)
- is curious about Indian art and tradition (Turtle Mountain Community College, 1992)
- is highly symbolic in creative production (Turtle Mountain Community College, 1992)

- displays a keen sense of humor (Turtle Mountain Community College, 1992)
- is inquisitive (Tonemah & Brittan, 1985)
- displays intellectual playfulness, fantasizes, imagines (Tonemah & Brittan, 1985)
- manipulates ideas by elaboration or modification (Tonemah & Brittan, 1985)
- is a risk taker; is adventurous and speculative (Tonemah & Brittan, 1985)
- has different criteria for success (Tonemah, 1987)
- displays a keen sense of humor reflective of own cultural background (Tonemah & Brittan, 1985)
- is individualistic, does not fear being different (Tonemah & Brittan, 1985)
- predicts from given information (Tonemah & Brittan, 1985)
- demonstrates exceptional expressive ability orally or in writing; creates stories, poems, etc.; imagines stories with detail (Montgomery, Bull, & Sayler, 1990; Tonemah & Brittan, 1985)
- is sensitive to color, design, arrangement, and other qualities of artistic appreciation and understanding (Tonemah & Brittan, 1985)
- is sensitive to melody, rhythm, form, tone, mood, and other qualities of music appreciation (Tonemah & Brittan, 1985)
- demonstrates exceptional ability/potential to produce unusual work in one of the fine arts (drawing, sculpture, painting) depending on experience and nurturing (Tonemah & Brittan, 1985)
- demonstrates unusual ability to produce unusual work in one of the practical arts (wood working, handicrafts, metal, mechanics, etc.) (Tonemah & Brittan, 1985)
- shows interest in unconventional careers (Tonemah & Brittan, 1985)
- is emotionally responsive (may not overtly respond in class) (Tonemah & Brittan, 1985)
- is aware of own impulses and open to irrational self (Tonemah & Brittan, 1985)
- has ability and desire to practice and complete projects on own (George, 1987)
- enjoys doing things in new ways (Montgomery, Bull, & Sayler, 1990)
- acts things out; enjoys drama (Montgomery, Bull, & Sayler, 1990

Artistic Talents (Music)

- performs better than others in singing or playing an instrument (Turtle Mountain Community College, 1992)
- enjoys performing in front of an audience (Turtle Mountain Community College, 1992)
- notable rhythmic sense—ability to recognize, retain, and reproduce rhythmic phrases; able to recognize series of intervals (Tonemah, 1987; Turtle Mountain Community College, 1992)
- has a highly accurate sense of pitch—ability to recognize, retain, and reproduce melody; (Tonemah, 1987; Turtle Mountain Community College, 1992)
- creates original music or improvises easily; able to expand on a series with his or her own interpretation (George, 1987; Tonemah, 1987; Turtle Mountain Community College, 1992)
- can express emotion through sound or music (Turtle Mountain Community College, 1992)

- sings or plays without prompting (Turtle Mountain Community College, 1992)
- organizes a musical group (Turtle Mountain Community College, 1992)
- is sensitive to melody, rhythm, form, tone, mood, and other qualities of music appreciation (Tonemah & Brittan, 1985)
- sings traditional Indian songs very well (Turtle Mountain Community College, 1992)
- plays traditional Indian instrument very well (Turtle Mountain Community College, 1992)
- creates new songs or music for the community (Turtle Mountain Community College, 1992)
- recognizes, retains, and reproduces traditional Indian rhythms(Turtle Mountain Community College, 1992)
- recognizes, retains, and reproduces traditional Indian melodies (Turtle Mountain Community College, 1992)
- has ability and desire to practice and complete projects on own (George, 1987)

Artistic Talents (Drama/Theater Arts)

- commands and holds the attention of a group (Turtle Mountain Community College, 1992)
- highly effective sense of timing (Turtle Mountain Community College, 1992)
- acts things out (Turtle Mountain Community College, 1992)
- enjoys classroom plays and skits (Turtle Mountain Community College, 1992)
- shows exceptional body control for particular age group (Turtle Mountain Community College, 1992)
- communicates feelings by means of voice, facial expression, gesture, and/or body movement (Turtle Mountain Community College, 1992)
- shows an unusual ability to dramatize feelings, experiences and stories (Turtle Mountain Community College, 1992)
- creates own skits or plays (Turtle Mountain Community College, 1992)
- skillful timing of humor (Turtle Mountain Community College, 1992)
- performs Indian story-telling as a dramatic art (Turtle Mountain Community College, 1992)
- can easily become a traditional Indian character, e.g., Coyote (Turtle Mountain Community College, 1992)
- able interpreter of emotion in Indian song/dance (Turtle Mountain Community College, 1992)
- strong interest in participating in traditional Indian drama or stories (Turtle Mountain Community College, 1992)
- portrays Indian characters (legendary, historical, contemporary) skillfully (Turtle Mountain Community College, 1992)
- has ability and desire to practice and complete projects on own (George, 1987)

Artistic Talents (Visual Arts)

- takes art work seriously; seems to find much satisfaction in it (Tonemah 1987; Turtle Mountain Community College, 1992)
- shows high ability to perceive form, contrast, and mood in the environment (Turtle Mountain Community College, 1992)
- uses art to express experiences and feelings; communication (Tonemah, 1987; Turtle Mountain Community College, 1992)

- fills extra time with drawing, painting, a craft, or other similar activity (Turtle Mountain Community College, 1992)
- evaluates own work (Turtle Mountain Community College, 1992)
- tries out new art materials and experiences (Turtle Mountain Community College, 1992)
- is sensitive to color, design, and arrangement (Tonemah & Brittan, 1985)
- often takes an original approach in works of art; creativity (Tonemah, 1987; Turtle Mountain Community College, 1992)
- shows high level of ability in Indian handicraft or design; can produce or copy a traditional design or totem symbol in beadwork, carving, or drawing (George, 1987; Turtle Mountain Community College, 1992)
- makes use of Indian themes or techniques to create original works of art or craft items; can use traditional form and vary and enhance it (George, 1987; Turtle Mountain Community College, 1992)
- creates Indian art using multiple media (Turtle Mountain Community College, 1992)
- creates traditional works of art rich in detail (Turtle Mountain Community College, 1992)
- has a keen sense of pattern as found in Indian craft (Turtle Mountain Community College, 1992)
- is sensitive to color, design, arrangement, and other qualities of artistic appreciation and understanding (Tonemah & Brittan, 1985)
- has ability and desire to practice and complete projects on own (George, 1987)
- can make different types of baskets, each for its own purpose (George, 1987)
- aware of space (Tonemah, 1987)
- aware of artistic tradition (Tonemah, 1987)

Dance

- moves well (Tonemah, 1987)
- good memory for music (Tonemah, 1987)
- good memory of steps (Tonemah, 1987)
- good memory of sequences (Tonemah, 1987)
- high energy/vitality (Tonemah, 1987)
- capable of muscular imagery (Tonemah, 1987)
- demonstrates presence in performance (Tonemah, 1987)
- concentration (Tonemah, 1987)
- mental discipline (Tonemah, 1987)
- muscular discipline (Tonemah, 1987)
- positive attitude toward performance (Tonemah, 1987)
- good sequencing (flow) (Tonemah, 1987)
- strength (Tonemah, 1987)
- displays stamina (Tonemah, 1987)
- evidence of balance (Tonemah, 1987)
- sensitive to rhythm (Tonemah, 1987)
- sense of timing (Tonemah, 1987)
- sensitivity to tempo changes (Tonemah, 1987)
- fluidity of movement (Tonemah, 1987)
- displays a personal style (Tonemah, 1987)

Leadership

- shows independence of actions; self-initiating (Tonemah & Brittan, 1985; Turtle Mountain Community College, 1992)

- is often asked for ideas and suggestions; generates ideas in group problem solving (Montgomery, Bull, & Sayler, 1990; Turtle Mountain Community College, 1992)
- is chosen as a leader (Turtle Mountain Community College, 1992)
- is sociable and extroverted; people oriented (Tonemah & Brittan, 1985; Turtle Mountain Community College, 1992)
- is able to take charge of a group; makes sure everyone has a chance to speak—even if it takes a long time (George, 1987; Turtle Mountain Community College, 1992)
- is self-confident with peers and adults (Tonemah & Brittan, 1985; Turtle Mountain Community College, 1992)
- uses humor readily to resolve tension in a group (Tonemah & Brittan, 1985; Turtle Mountain Community College, 1992)
- perceives and expresses the feelings of the group (Turtle Mountain Community College, 1992)
- has a strong sense of loyalty and responsibility toward the group; one who accepts willingly the responsibility of leadership (George, 1987; Tonemah & Brittan, 1985; Turtle Mountain Community College, 1992)
- can usually look ahead to the end result of a decision (Turtle Mountain Community College, 1992)
- listens well to others (Turtle Mountain Community College, 1992)
- can make group members feel needed (Turtle Mountain Community College, 1992)
- communicates well with peers and adults (Tonemah & Brittan, 1985; Turtle Mountain Community College, 1992)
- adapts readily to new situations; is flexible in thought and actions (Tonemah & Brittan, 1985; Turtle Mountain Community College, 1992)
- is chosen leader in tribal/community activities (Turtle Mountain Community College, 1992)
- liked and respected by peers (Tonemah & Brittan, 1985)
- inquisitive (Tonemah & Brittan, 1985)
- decisionmaker (Tonemah & Brittan, 1985)
- problemsolver; able to recognize problems and figure out how to solve them (George, 1987; Tonemah & Brittan, 1985)
- self-disciplined (Tonemah & Brittan, 1985)
- persistent; task committed (Tonemah & Brittan, 1985)
- aware of self (Tonemah & Brittan, 1985)
- dependable (Tonemah & Brittan, 1985)
- good at organization (Tonemah & Brittan, 1985)
- self-disciplined; one who accepts willingly the discipline of leadership (George, 1987; Tonemah & Brittan, 1985)
- productive; one who sets goals and has high expectations for those he or she teaches or leads (George, 1987; Tonemah & Brittan, 1985)
- patient (Tonemah & Brittan, 1985)
- enthusiastic (Tonemah & Brittan, 1985)
- courageous (Tonemah & Brittan, 1985)
- respects self and others (Tonemah & Brittan, 1985)
- assertive (Tonemah & Brittan, 1985)
- a good mediator; brings harmony to people and unites them (George, 1987)

- has influence in group decisions (Montgomery, Bull, & Sayler, 1990)

Specific Academic Areas (Science)

- is a keen and alert observer of scientific or natural phenomena; sees the unusual or what may be overlooked by others (Turtle Mountain Community College, 1992)
- has a well-developed science interest, for example, watches science programs, knows local plants well (Turtle Mountain Community College, 1992)
- sees logical solutions to problems (Turtle Mountain Community College, 1992)
- has a ready grasp of underlying principles in science (Turtle Mountain Community College, 1992)
- likes to discuss science topics with adults and/or peers (Turtle Mountain Community College, 1992)
- shows concentration and task commitment when involved in science activities or projects (Turtle Mountain Community College, 1992)
- persists despite failures when experimenting or making projects (Turtle Mountain Community College, 1992)
- engages in his/her own special science projects (Turtle Mountain Community College, 1992)
- makes computations in relation to the circle of life, medicine wheels (Turtle Mountain Community College, 1992)
- interested in the relationship between Indian legends and other astronomical explanations (Turtle Mountain Community College, 1992)
- correlates (sees the relationships between) the traditional value of the earth with current environmental movements (Turtle Mountain Community College, 1992)
- strong detailed interest in understanding past adaptations to the environment (Turtle Mountain Community College, 1992)
- detailed knowledge of soils and clays used in Indian buildings, pipes, pottery (Turtle Mountain Community College, 1992)
- likes to transmit knowledge of science by nurturing younger science students (Turtle Mountain Community College, 1992)
- perceives patterns and systems in the environment (Turtle Mountain Community College, 1992)

Specific Academic Areas (Social Studies)

- shows curiosity and interest in a variety of social issues (Turtle Mountain Community College, 1992)
- skillful in assessing and interpreting information (Turtle Mountain Community College, 1992)
- uses inquiry skills (Turtle Mountain Community College, 1992)
- develops alternatives and solutions to a variety of problems (Turtle Mountain Community College, 1992)
- has a commitment to human dignity in applying knowledge (Turtle Mountain Community College, 1992)
- perceives patterns and systems in the environment (Turtle Mountain Community College, 1992)
- understands historic perspective (Turtle Mountain Community College, 1992)
- has a willingness to express uncertainty (Turtle Mountain Community College, 1992)

- has a willingness to express minority opinions (Turtle Mountain Community College, 1992)
- participates in discussions about social issues (Turtle Mountain Community College, 1992)
- shows curiosity and interest in a variety of Indian social issues (Turtle Mountain Community College, 1992)
- able to perceive and understand Indian historical perspective and compare and contrast to other perspectives (Turtle Mountain Community College, 1992)
- highly aware of traditional Indian relationships to the environment (Turtle Mountain Community College, 1992)
- able to conceptualize and understand Indian values (Turtle Mountain Community College, 1992)
- able to perceive and express traditional (or contemporary) Indian viewpoints (Turtle Mountain Community College, 1992)
- has outstanding potential for active involvement in the tribe, family, or Indian community (Turtle Mountain Community College, 1992)
- has a well-developed understanding of the unique features of Indian life (for example, the place of his or her tribe within the larger American society, the role of tribal government, etc.) (Turtle Mountain Community College, 1992)

Specific Academic Areas (Language Arts)

- enjoys composing original poems or stories (Turtle Mountain Community College, 1992)
- tells stories in detail (Turtle Mountain Community College, 1992)
- is interested in books and reading in a wide variety of areas or deeply in one area (Turtle Mountain Community College, 1992)
- reads books higher than grade level (Turtle Mountain Community College, 1992)
- uses metaphor and analogy in speaking and/or writing (Turtle Mountain Community College, 1992)
- uses rich, descriptive expressions in talking or writing (Turtle Mountain Community College, 1992)
- highly attentive listener; remembers exceptionally well (Montgomery, Bull, & Sayler, 1990; Turtle Mountain Community College, 1992)
- tells or writes Indian stories skillfully, in tribal language or English (Turtle Mountain Community College, 1992)
- sees humor and irony of everyday situations (Turtle Mountain Community College, 1992)
- outstanding at retelling jokes (Turtle Mountain Community College, 1992)
- skillful at switching style of communication when appropriate (Turtle Mountain Community College, 1992)
- likes to play word games (Turtle Mountain Community College, 1992)
- fluent in using Indian/tribal styles of phrasing, analogy, metaphor—tribal language or English (Turtle Mountain Community College, 1992)
- strong interest in comparing words and grammar of tribal language and English (Turtle Mountain Community College, 1992)
- reads avidly about Indian people, their legends, lives, songs, or activities in tribal language or English (Turtle Mountain Community College, 1992)
- shows high interest in reading work by today's Indian writers (Turtle Mountain Community College, 1992)

- has a large vocabulary in English or native language (Montgomery, Bull, & Sayler, 1990)
- uses words to express thought and meaning (Montgomery, Bull, & Sayler, 1990)

Specific Academic Areas (Mathematics)

- has a ready grasp of math concepts and calculations (Turtle Mountain Community College, 1992)
- has an advanced understanding of mathematics relationships (Turtle Mountain Community College, 1992)
- applies math skills and concepts to activities and projects other than math (Turtle Mountain Community College, 1992)
- persists in working at a mathematical idea that interests her/him (Turtle Mountain Community College, 1992)
- performs math operations above grade level (Turtle Mountain Community College, 1992)
- usually estimates successfully (Turtle Mountain Community College, 1992)
- readily grasps abstract concepts (Turtle Mountain Community College, 1992)
- progresses independently in math skills (Turtle Mountain Community College, 1992)
- understands and remembers mathematical symbols for formulas (Turtle Mountain Community College, 1992)
- plays Indian games—dice games, logic patterns, strategy games that require math calculations, logic, and estimating odds (Turtle Mountain Community College, 1992)
- aware that applying mathematical relationships is part of Indian traditional life—for example in fitting designs to rounded surfaces (Turtle Mountain Community College, 1992)
- uses ratio and proportion skillfully in craftwork (Turtle Mountain Community College, 1992)
- demonstrates interest in symbolic numerical relationships in Indian design (baskets, quilts, pottery, beadwork, etc.) (Turtle Mountain Community College, 1992)

Special Abilities in Social Skills

A person with special ability in social skills is . . .

- willing to share whatever he/she has (George, 1987)
- one who cares about others and shows them love and respect (George, 1987)
- one who believes that elders are responsible for protecting and nurturing the "gifts of the spirit" in the children, and for guiding them to be the best they know how (George, 1987)
- able to share his or her life force/spirit with others (George, 1987)
- able to use words well to express thoughts and meanings (George, 1987)
- one who helps others without embarrassing them (George, 1987)

Special Abilities as Harvester, Hunter, Fisher

A person with special abilities as a harvester, hunter, fisher . . .

- knows his/her or own physical abilities and what he or she can or cannot do (George, 1987)
- finds the correct path or trail or highway to a place—has a good sense of direction (George, 1987)

- is physically strong enough to do what is required with confidence (George, 1987)
- recognizes the characteristics of the seasons and understand what they indicate (George, 1987)
- knows the kinds of conditions necessary for catching certain types of game (George, 1987)
- recognizes danger and avoids it in the forest (George, 1987)
- sees tracks and is able to tell to which animal they belong (George, 1987)
- knows where certain wild berries and roots can be found (George, 1987)

Specific Abilities in Creative Writing (secondary American Indian students)

- conveys images effectively (Tonemah, 1987)
- projects strong and clear message or theme (Tonemah, 1987)
- exhibits clarity, coherence, and cohesiveness in writing (Tonemah, 1987)
- uses original and unique ideas, style (Tonemah, 1987)
- exhibits evidence of individual style or developing style (Tonemah, 1987)
- capable of mastering subtleties of language (Native, English, or both) (Tonemah, 1987)
- able to listen to and use criticism constructively (Tonemah, 1987)
- curious (Tonemah, 1987)
- interest in reading and words (Tonemah, 1987)

Traits of writers which may be specific to American Indians include:

- writes in simple formats (Tonemah, 1987)
- uses imagery (Tonemah, 1987)
- writing reflects cultural context (Tonemah, 1987)
- writing reflects oral tradition (Tonemah, 1987)
  a. circular in form
  b. epic in scope/nature
  c. relies on common knowledge of Indian audience or readers

For poetry:

- concise (Tonemah, 1987)
- uses imagery (Tonemah, 1987)
- uses unique and appropriate arrangement on page (Tonemah, 1987)
- poetry exhibits sense of rhythm (Tonemah, 1987)
- poetry sets mood (Tonemah, 1987)

For short story/novel:

- clear characterization (Tonemah, 1987)
- well-developed sequence of events (Tonemah, 1987)
- plot is developed (when and if appropriate) (Tonemah, 1987)
- clear sense of setting or place and how it relates to character and plot (Tonemah, 1987)

Appendix E

Two Case Studies as Examples of Identification

The rationale behind a case study approach is that each student is considered as an individual case rather than compared to peers and that any and all available (and appropriate) information is considered.

The strategy for each area of talent being considered should be modified and adapted for that particular talent and should include appropriate sources of information and assessment tools used to rate or otherwise judge student performance and potential. The examples below are based on the construct of general intellectual ability since this is a very commonly used construct in existing gifted-education programs.

Schools Having a Small Minority of American Indian/Alaska Native Students

Home and Community

- Information pertaining to the program, its goals, and the concept of general intellectual ability is distributed to parents and community members who are likely to have contact with children. A list of behaviors that may be indicative of this ability is included. If this list does not include items found to relate specifically to minority and low socioeconomic status students, a separate list should be included. Any community that has one or more significant minority populations (e.g., American Indian, Alaska Native) should include lists with items relating to those cultures. Forms or procedures for nomination should be included. If more than one language is used in the community, directions should be included in each language.
- The relevant leaders of the community and tribe should be solicited for information about the ways the student has distinguished herself or himself in the community. They might be asked to describe the ways in which the community prospers or may prosper by the contribution of the student.

Schools

- Within the school, nominations are sought from all professional and nonprofessional staff. (Students should also have the opportunity to nominate themselves or to give information about peers.) As with community nominations, it is essential that staff members be given information about traits to look for and that these traits include all cultural and socioeconomic groups.
- Teachers should be asked to keep copies of student work that indicate intellectual strength and provide these copies to the selection committee. Also, any anecdotes the teacher can share about student intelligence evidenced through discussion or behavior should be noted. These should be presented to the committee as a portfolio.
- Information included in school records (e.g., grades, IQ tests, achievement measures) should be examined to see which information has been found to be reliable and valid as a measure of intellectual ability. Only the pieces of information found to be appropriate should be considered (the rest should be left in the file). In cases

where a particular measure (e.g., an IQ test) has demonstrated validity and reliability for only *some* of the school population, alternative measures should be sought and utilized for other students.

The Committee

- The selection committee compiles all the data on each student and examines it for any evidence of student need based upon intellectual ability. The committee should seek convincing information, whether it comes in the form of one piece of evidence or in the form of patterns of evidence across the range of information collected. In cases where there is question, further information should be sought from some reliable source such as teachers, parents, children, or further testing. The committee must take this task of seeking information seriously or minority and other traditionally underrepresented students will be less likely to be selected than they probably should be. It is essential that committee members be familiar with the cultural backgrounds of all students.

The committee's task is to identify talents that warrant special instruction and all identification should be justified by the interventions recommended for the particular students.

Reservation and Other Schools Having a Majority of American Indian/Alaska Native Students

Home and Community

- Information pertaining to the program, its goals, and the concept of general intellectual ability is distributed to parents and community members who are likely to have contact with children. A list of behaviors that may be indicative of this ability is included. *This list should be one that has been devised locally or has been shown to be appropriate for Native students.* Any community that has one or more significant minority populations should include lists with items relating to those cultures. Forms for nomination or procedures for nomination should be included. If more than one language is used in the community, directions should be included in each language.
- The relevant leaders of the community and tribe should be solicited for information about the ways the student has distinguished herself or himself in the community. They might be asked to describe the ways in which the community prospers or may prosper by the contribution of the student.

Schools

- Within the school, nominations are sought from all professional and nonprofessional staff. (Students should also have the opportunity to nominate themselves or to give information about peers.) As with community nominations, it is essential that staff members be given information about traits to look for and that these traits include all cultural and socioeconomic groups.
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The committee's task is to identify talents that warrant special instruction and all identification should be justified by the interventions recommended for the particular students.

Appendix F

Assessment Instruments Suggested in the Literature

The following instruments have been identified by certain individuals as useful in identifying gifted American Indian children. Some of these have been used although they do *not* have demonstrated reliability and validity for this purpose; attempts should be made to assess the appropriateness of these measures for specific populations of American Indians.

In many cases, the authors cited have advocated the use of these measures only in certain circumstances, in certain combinations, or when using particular scoring procedures. In all cases, readers should consult the original authors for precise descriptions of their uses of these instruments.

Instruments are included in this list only if they have been suggested specifically for assessing the American Indian student or were developed to assess the construct described.

Intellectual Ability

Structure of the Intellect Learning Abilities Test (George, 1987).

Kaufman Assessment Battery for Children (K–ABC) (Florey & Tafoya, 1988; Florey, et al., 1986; Davidson, 1992).

Ravens Progressive Matrices (Florey, et al., 1986; Kirschenbaum, 1989).

Draw-A-Person Test (Florey, 1986).

Wechsler Intelligence Scale for Children—Revised (WISC–R) (Tempest & Skipper, 1988).

Creativity

Torrance Test of Creative Thinking (TTCT) (Florey, et al., 1986; Kirschenbaum, 1989).

Torrance Test of Creative Thinking (Figural) (Tonemah, 1987).

Creative Products Scales (from Detroit Public Schools) (Tonemah, 1987).

PRIDE (Kirschenbaum, 1989).

GIFT (Kirschenbaum, 1989).

GIFFI (Kirschenbaum, 1989).

Torrance's Creative Positives (George, 1987; Tonemah, 1987).

Scales for Rating Behavioral Characteristics of Superior Students (SRBCSS) (Florey, et al.,1986).

Indian Student Biographical Rating Scale (Kirschenbaum, 1989).

Contributing Artists

Inside front cover:
Vena Romero, age 13, Cochiti Pueblo/Kiowa.

Pages iv, vii, 1, 2, 4, 9, 10, 15, 18, 24, 25, 27, 35, 37, 40, and 41
Original art and writings by students attending Pine Ridge High School, Pine Ridge, South Dakota.

Pages v, 8, 19, 20, 35, and 39
Original writings from students attending St. Charles Cathedral School and Plenty Coups High School, Pryor, Montana.

Page 2
Donna Malchoff, Port Graham School, Port Graham, Alaska.

Pages 3 and 7
Original writings from students attending Exploration in Creativity at Oklahoma City University, sponsored by American Indian Research and Development, Inc.

Pages 5, 11, 13, 17, 23, 24, and 29
Original art and writings by students attending the Native American Intertribal University Preparatory Summer Program at the University of California, Irvine, 1992.

Page 11 shows a tessellation—a symmetrical design which often incorporates recognizable images.

Page 36
Examples of the Cherokee Nation language, Cherokee Nation Education Department.

Page 42
Original art by Andy Watch, Navajo.

Inside back cover and selected pages:
Original art by Jason Runnels, Oglala Lakota (see below).

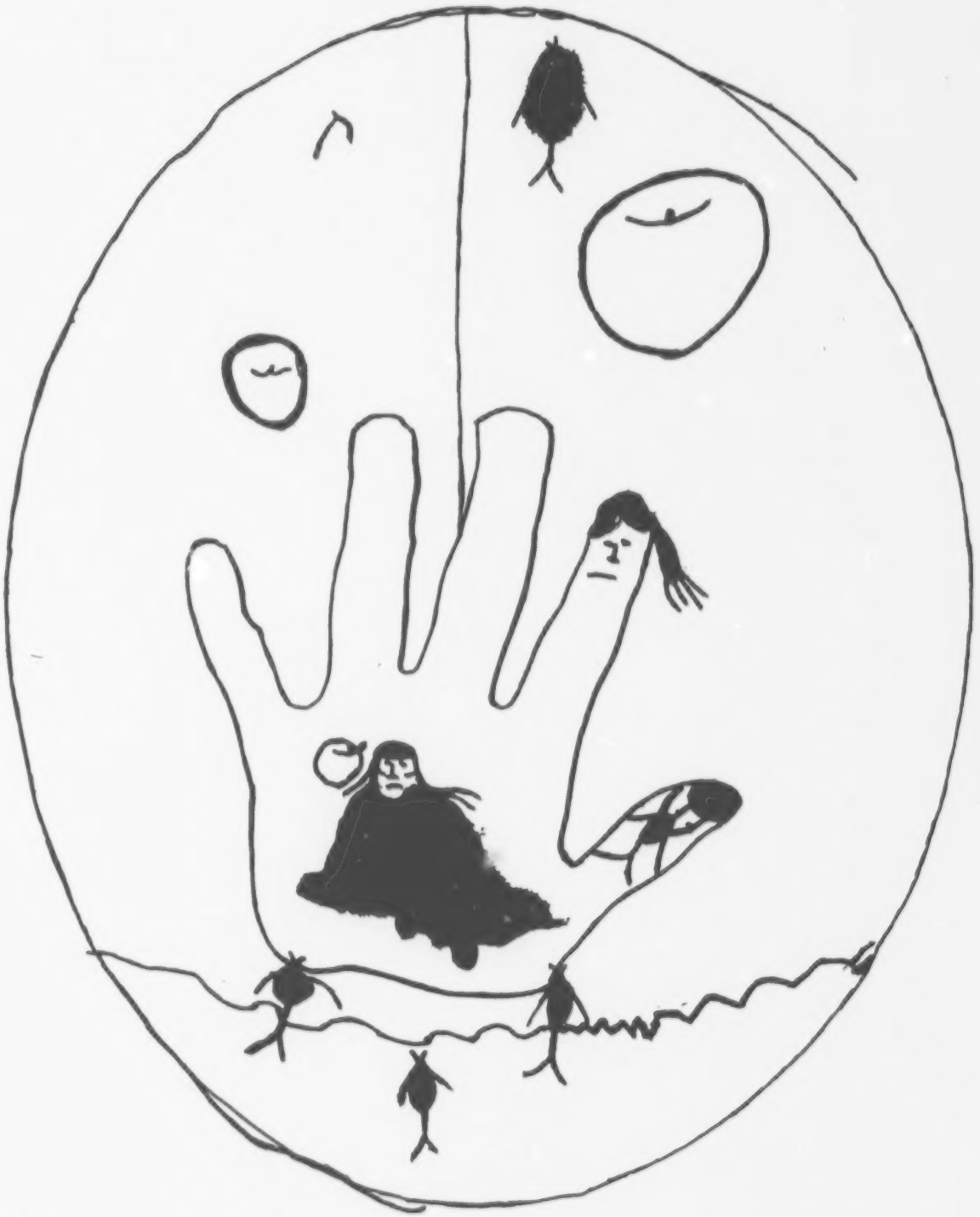
Cover by Vic Runnels

Vic Runnels is an enrolled member of the Oglala Lakota Tribe, Pine Ridge, South Dakota. His Lakota name, Ishnala Wecha, means "The Only Man." This name was given to him by the Red Cloud family when he was in his 20's. He has extensive experience in both commercial art and the fine arts. He received his AA degree from Ray-Vogue School of Design and trained at the American Academy of Arts in Chicago. He worked as a commercial artist for 12 years in the Chicago area. In 1973, he moved back to South Dakota and worked as a commercial artist for the Bureau of Indian Affairs in Aberdeen, South Dakota, and for the South Dakota Arts Council, Artists-in-Schools Program until 1991. He has owned and operated his gallery since that time. Vic has received numerous awards for both commercial art and fine arts, including the South Dakota Advertising Federation, the Red Cloud Indian Art Show, Pine Ridge South Dakota, and the Northern Plains Tribal Art Show, Sioux Falls, South Dakota. He is represented in many public and private collections.

Book designed by Margery Martin.

Inspired by Jason Runnels

"The cover illustration for this book was taken from a drawing my son, Jason, did when he was 5 and in Kindergarten. At Thanksgiving time, the teacher had the children tracing the shape of their hands to make turkeys. Jason didn't want to draw turkeys, so he drew faces in the fingers, people in the palm of the hand, eagles and suns in the sky, and fish in the water. The teacher reprimanded him for not following instructions. When he brought these drawings home, I was thoroughly impressed. I asked what they represented. He said, "The Great Spirit watching over the Earth." Believe me, I was astounded that such a profound idea could come from this little boy. I have used his idea for the cover of this book, and part of his drawing (the hand) is used inside. I think this incident is a perfect example of a teacher's inability to recognize outstanding talent. Jason is now 18 years old. He is a champion Lakota Traditional Dancer, sings with a traditional drum group, plays guitar and drums, and continues to produce art. He studied art in Europe, at the Luxembourg Summer Art Academy in Luxembourg when he was 9 years old. He was enrolled in the adult drawing and watercolor classes at that academy. Truly a gifted and talented student." VR



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